

# LogMeIn Hamachi

## User Guide



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# Contents

<b>LogMeIn Hamachi Fundamentals.....</b>	<b>5</b>
What Is LogMeIn Hamachi?.....	5
Who Should Use LogMeIn Hamachi?.....	5
The LogMeIn Hamachi Client.....	6
About the Relationship Between the Client and Your LogMeIn Account.....	6
About the Hamachi Virtual IP Address.....	7
LogMeIn Hamachi Network Types .....	7
About Mesh Networks.....	7
About Hub-and-Spoke Networks.....	7
About Gateway Networks.....	8
LogMeIn Hamachi Subscription Types.....	9
How to Change or Purchase Hamachi Subscriptions.....	10
Managing LogMeIn Hamachi Clients and Networks.....	11
LogMeIn Hamachi Security.....	11
LogMeIn Hamachi and Firewalls.....	11
<b>Installing LogMeIn Hamachi.....</b>	<b>12</b>
Hamachi System Requirements.....	12
How to Sign up for a LogMeIn ID.....	12
How to Install the Client to a Local Computer.....	13
On Windows or Mac.....	13
On CentOS (Linux).....	13
On Ubuntu (Linux).....	14
How to Deploy the Client to a Remote Computer.....	14
How to Install a Hamachi Client in Client-Only mode.....	15
How to Update the Hamachi Client.....	15
On Windows or Mac.....	15
On Linux.....	16
<b>Managing LogMeIn Hamachi Clients.....</b>	<b>17</b>
How to Set Default Settings for Deployed Clients.....	17
How to Attach an Unattached Client to a LogMeIn Account.....	18
On Windows.....	18
On Mac.....	18
On Linux.....	19
How to Rename a Client On the Website.....	19
How to Add/Remove a Client to/from a Network.....	19
How to Add a Hamachi Mobile Client.....	20
Setting up an iOS device as a Hamachi mobile client.....	21
Setting up an Android device as a Hamachi mobile client.....	22
How to Change the Client Interface.....	22
How to Detach (Delete) a Client from Your Account.....	23
Using Tags to Help Manage Clients in Your Account.....	24
How to Create and Manage Tags.....	24
How to Assign Tags to a Client.....	24
<b>Using the LogMeIn Hamachi Client.....</b>	<b>25</b>
How to Join an Existing Network.....	25
On Windows and Mac.....	25
On Linux.....	25
How to Chat in a Network.....	25

How to Send an Instant Message on a Windows Client.....	26
How to Appear Online or Offline to Other Network Members.....	26
On Windows and Mac.....	26
On Linux.....	27
What do the Different Color Indicators Mean in LogMeln Hamachi?.....	27
Securing Your Hamachi Network Connections.....	27
How to Password Protect Your Network.....	28
How to Protect Your Network with RSA Keys.....	28
How to Establish a Connection to All Unverified Peers.....	28
How to Establish a Connection to a Single Unverified Peer.....	28
How to Check the Network Connection of Another Online Client.....	29
How to Manage the Preferences of Clients.....	29
How to Change Basic Settings.....	30
How to Change the Advanced Interface Settings.....	30
How to Change the Server Connection Settings.....	32
How to Change Peer Connection Settings.....	32
How to Change Your Online Presence.....	33
How to Change Chat Settings.....	34
How to Change Colors in the Chat Window.....	35
How to Rename a Client from the Client.....	35
How to Update the Client Automatically.....	35
How to Find Configuration and Installation Directories.....	36
How to Collect Information for Troubleshooting.....	36
How to Disable Port Detection for Peer-to-Peer Connection.....	37
How to Backup and Restore Hamachi Client Configuration.....	37
Managing Unattached Networks from the Client.....	38
How to Set Access for an Unattached Network.....	38
How to Delete an Unattached Network.....	39
How to Evict a Member of an Unattached Network.....	40
Hamachi for Linux Fundamentals.....	40
<b>Managing LogMeln Hamachi Networks.....</b>	<b>42</b>
How to Set the Default Response to Network Join/Exit Requests.....	42
How to Add a Hamachi Network.....	42
How to Configure a Hamachi Gateway on Windows to Recognize Multiple Subnets.....	43
How to Assign an IP Range for Gateway Members on Windows.....	44
How to Configure Home LAN Behavior for Gateway Network Members.....	44
How to Add a Hamachi Network from the Client.....	45
On Windows or Mac.....	45
On Linux.....	45
How to Rename a Network.....	45
How to Approve or Reject Join Requests.....	46
How to Edit Network Settings.....	46
How to Modify the Client's Role in a Network.....	47
How to Change Network Password Settings.....	47
How to Delete a Network.....	48
How to Leave a Network.....	48
How to Resolve Network Member Limit Issues.....	48
How to Transfer a Hamachi Network to Your LogMeln Account.....	49
How to Change the Priority of the Virtual Network Adapter.....	49
<b>LogMeln Hamachi Troubleshooting.....</b>	<b>50</b>
Using Hamachi Self-Diagnosis to Detect Problems.....	50
Troubleshooting your Hamachi client.....	50
Troubleshooting a specific peer.....	50

---

What can I do when problems are detected?.....	50
Troubleshooting Failed Hamachi Client Setup.....	51
Troubleshooting Hamachi Rejected Login Request.....	51
Troubleshooting a Windows Hamachi Client Failing to Connect to the Hamachi Engine.....	52
Windows Hamachi Client Fails to Connect to the Hamachi Network Adapter.....	52
Resolution One.....	53
Resolution Two.....	53
Resolution Three.....	54
Other Resolutions.....	54
Troubleshooting Windows Network Connections.....	54
Troubleshooting a Hamachi Client Failing to Go Online.....	55
Troubleshooting Pinging Hamachi Hosts.....	55
Troubleshooting a Hamachi Client in Probing Status.....	56
Troubleshooting Hamachi Client Request Time Out.....	56
Troubleshooting Communication between Hamachi Clients.....	56
Troubleshooting Hamachi v1.x Network Restoration on Windows Clients.....	57
<b>LogMeIn Hamachi Glossary.....</b>	<b>58</b>
<b>Legal Notice.....</b>	<b>60</b>

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# LogMeIn Hamachi Fundamentals

## What Is LogMeIn Hamachi?

LogMeIn Hamachi is a virtual networking service that can be set up in minutes and enables secure remote access to your business network anywhere there is an Internet connection.

Unlike traditional hardware and software based VPN systems, Hamachi is an on-demand virtual networking service that allows you to focus your time and energy on providing the remote connections your users and systems need, and not the technology or infrastructure you are using to support them.

## Who Should Use LogMeIn Hamachi?

Here are a few examples of how you can take advantage of Hamachi.

### IT Support: Building a Mobile Office LAN

Many mobile workers use their laptops in the office while connected to their company's shared resources (file servers, network printers, mail servers, etc.). But if a user moves away from the local network, he will no longer be able to access these resources. Software that is configured to work *inside* the office becomes useless *outside* the office.

Using Hamachi, mobile workers become members of a Hamachi network wherein all shared resources are also network members. As a result, network configurations can remain unchanged. Hamachi sets up exactly the same networking environment for the mobile user no matter where he is.



**Tip:** **Hub-and-spoke** and **gateway** are the best networking modes for this scenario.

### IT Support: Setting Up Network Access for Home Workers

Home workers can be more productive when they have secure access to shared IT resources. Using the Hamachi client, home workers gain a secure tunnel directly into their company's network. They can work from home and still access the resources they need.



**Tip:** **Hub-and-spoke** and **gateway** are the best networking modes for this scenario.

### Outsourced IT: Managing Multiple Networks

A service provider with a number of administrators on his team wants to set up and maintain multiple Hamachi networks for multiple customers. He uses **LogMeIn Central** to create Hamachi networks, deploy Hamachi clients, and apply default and custom settings for each customer. He can also manage other administrators in his organization, generate client activity reports, and manage network activity.

### Small to Medium Sized Organizations: Virtual LAN

Organizations without a physical LAN can use the mesh network type to set up a virtual corporate LAN.

## The LogMeIn Hamachi Client

The term Hamachi client refers to both the Hamachi software itself and any computer or smartphone with Hamachi client software installed. With proper permission from network owners, Hamachi clients can become members of any Hamachi network.

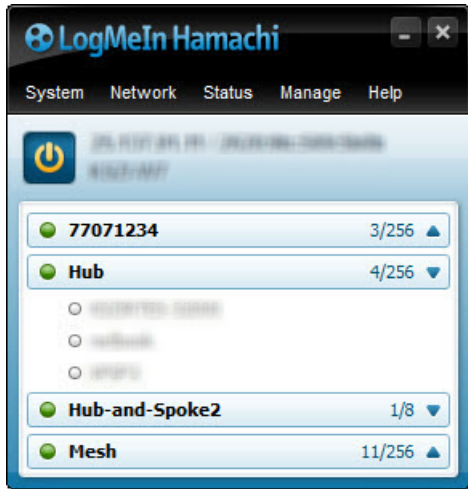


Figure 1: The LogMeIn Hamachi client for Windows



Figure 2: The LogMeIn Hamachi client for Mac

A command-line version of LogMeIn Hamachi is also available for Linux and officially supported on the following distributions:

- Ubuntu 16.04 LTS or newer
- CentOS 7.2 or newer

## About the Relationship Between the Client and Your LogMeIn Account

The Hamachi client can only be used with a LogMeIn ID, as an attached member of a LogMeIn account.

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## About the Hamachi Virtual IP Address

Every Hamachi client has one virtual IPv4 (IP) address in the 25.x.x.x range and one IPv6 address. The virtual IP address is globally unique and is used to access the client from any other Hamachi network with at least one common mesh or hub-and-spoke network.

## LogMeIn Hamachi Network Types

LogMeIn Hamachi provides three network types for flexibility in meeting diverse use case scenarios: Mesh, Hub-and-Spoke, and Gateway. They differ mainly in network topology.

### About Mesh Networks

In a mesh network, every member is connected to every other member.

Organizations without a physical LAN can use the mesh network type to set up a virtual corporate LAN.

Mesh is also the typical choice for gamers, because network games constantly have to broadcast their current status to all other participants in the game.



Figure 3: Mesh network



**Note:** Mesh is the only network type that can be created directly from the Hamachi client interface.

### About Hub-and-Spoke Networks

In a hub-and-spoke network, one or more computers act as hubs, while other clients connect as spokes. Spokes connect to hubs, but never to each other.

Hub-and-spoke is typically used when a workstation (spoke) needs to connect only to servers (hubs). For example, in a library, the catalog is a hub while workstations accessing the catalog are spokes. Hub-and-spoke is ideal if you want strict control over connections between network members.



Figure 4: Hub-and-spoke network



**Important:** If you set every member of a hub-and-spoke network to be a hub, you essentially turn the network into a mesh network. Similarly, if you set only spokes, your members will be unable to make a connection.

---

## About Gateway Networks

Use the gateway network type to provide transparent access to your entire network from a centralized Hamachi gateway. Members of a gateway network, such as mobile workers, will see one computer acting as a gateway towards an entire LAN, thus making all network resources accessible.



**Figure 5: Gateway network**



**Tip:** Theoretically, a hub-and-spoke network would also be a good choice for enabling mobile LAN access; however, all shared resources would also need to be running the Hamachi client and be set up as hubs. This is fine insofar as these shared resources are servers with a Hamachi compatible operating system; however, the gateway network remains the best option since Hamachi currently cannot be installed on network devices such as printers, routers, access points, etc.



**Important:** Mac hosts cannot act as gateway nodes.

### Characteristics

The gateway network type is a hybrid of the meshed and hub-and-spoke network types:

- As in a hub-and-spoke network, one computer acts as a hub (the gateway), while members act as spokes
- There can only be one gateway, which is typically a permanently online server connected to the LAN
- The number of members is virtually unlimited since even network devices that are not running the Hamachi client can be considered members
- Each member (Hamachi client) will see the gateway and the other members of the gateway's LAN
- Hamachi clients will not see each other in a gateway network

### Restrictions

For technical and security reasons there are strict rules for both the gateway and members:

- The gateway cannot be a member of any other network
- Members can join more than one gateway network, but can only be online in one network at a time. Gateway members can also be members of multiple non-gateway networks
- The gateway cannot be a workstation that is the member of a domain

### Role of the Hamachi Client in a Gateway Network

- Gateway network members and the gateway device itself must be running the Hamachi client
- Network devices that are physically connected to the LAN do not need to run the Hamachi client to be made accessible to gateway network members

### Addressing

Gateway networks integrate smoothly into the LAN in terms of addressing. 25.x.x.x addresses are not available for a gateway network. Instead, the local address space is used.



## LogMeIn Hamachi Subscription Types

Every Hamachi user must have either a paid or free subscription to join or create Hamachi networks.

*Free*, *Standard*, and *Premium* LogMeIn Hamachi subscriptions are available at the network level. You can have an unlimited number of Free, Standard, and Premium networks in your account, in any combination. Standard and Premium subscriptions are purchased for and applied to individual networks.

Regardless of the type and number of subscriptions you purchase, you can attach a maximum of 256 **clients** to your LogMeIn account; the number of clients is independent of the number of members per network.

Subscription type	Valid for this many networks	Members per network
Free	Unlimited	5
Standard	1 (purchased individually, per network)	32
Premium	1 (purchased individually, per network)	256

The *Multi-Network* subscription option is applied across an entire LogMeIn **account**, allowing you an unlimited number of networks with up to 256 members per network. With Multi-Network you are still subject to the limit of 256 **clients** per account. The number of clients allowed at the LogMeIn account level is independent of the number of members per network. This means that you can have potentially far more **members** in your networks than **clients** attached to your account.



**Tip:** When attempting to add a new client, you may be informed that you have reached your client limit. If this occurs, you must create "free space" in your account by removing an unused client. Otherwise, the client can only join your network if it is attached to another account and joins your network as a guest.

Subscription type	Valid for this many networks	Members per network
Multi-Network	Unlimited	256



**Tip:** The current and maximum number of network members are displayed on the Hamachi client next to the name of the network. For example, **11/256** means that there are 11 members in a network that can have up to 256 members.

### What if I do not want to renew my subscription?

Standard, Premium, and Multi-network subscriptions are paid subscriptions that allow you to have more than five members in your network. If your network has more than five members, you should take the following into consideration before you cancel your subscription:

- Your network will not accept any new members.
- Only five members will be active. Other members will be disabled (offline) in your network until you resolve this issue by purchasing a subscription or evicting network members.

- Your network will still be fully functional but only for five randomly selected members.
- You can renew your expired subscription any time.

#### **What if I never had a paid subscription?**

For free networks, only five members remain active and you are unable to add new members. For example, a free network that was created with 14 members before introducing Standard, Premium, and Multi-network subscriptions will be functional for five random members and will not accept new members.



**Important:** If you have more than five members in a network and you choose to have a free subscription, you will not be able to add new members until you remove some of them from the network. For more information, see [How to Resolve Network Member Limit Issues](#) on page 48.

## **How to Change or Purchase Hamachi Subscriptions**

Depending on the size of your network you can purchase several types of subscriptions. You can buy a Hamachi subscription either from the LogMeIn website or from the Hamachi client. See [LogMeIn Hamachi Subscription Types](#) on page 9.

### **How to Purchase Subscriptions from the LogMeIn Website**

1. On the **My Networks** page, click **Edit** next to the network you want to work with. The **Edit Network** page is displayed.
2. Select the **Subscription** tab.  
Your current subscription is selected.
3. Select a subscription type that you want to use or purchase.
4. Switch to the selected subscription:
  - Click **Change subscription** if you have already purchased the selected subscription
  - Click **Buy subscription** to purchase a new subscription and follow all instructionsYour changes are applied.

### **How to Purchase Subscriptions from the Hamachi Client**

1. Do one of the following to open the LogMeIn Hamachi website:
  - Click **Manage > Manage Networks**.
  - If you see a blue warning icon next to the name of your network then
    1. Click the blue warning icon next to the name of the network that you want to upgrade.
    2. Click **Upgrade options**.

The Hamachi website opens in your browser.

2. Log in to your LogMeIn account:
  - Click **Create Account** if you do not have a LogMeIn account yet and follow all instructions.
  - Click the **Login** link if you have a LogMeIn account.

The subscription purchase page opens.

- 
3. Select the type and number of subscriptions you want to buy and click **Buy Now**.
  4. Follow all instructions to complete your purchase.

## Managing LogMeIn Hamachi Clients and Networks

### Hamachi Web Management Features

Any Hamachi user with a LogMeIn account can manage attached clients and networks using the LogMeIn web site (My Networks page).

- Create mesh, hub-and-spoke, and gateway networks
- Remotely manage client settings
- Manage the default settings to be applied to a new network
- Edit or delete existing networks
- Install the Hamachi client to the local computer
- Deploy the Hamachi client to a remote computer
- Manage requests to join Hamachi networks

### Hamachi Client Management Features

Hamachi clients provide access to the following features:

- Create mesh networks
- Manage the default settings to be applied to a new network
- Edit or delete existing networks created on the client
- Install the Hamachi client to the local computer
- Deploy the Hamachi client to a remote computer (Not available on Linux)
- Manage requests to join Hamachi networks

### Free versus Paid Subscriptions

Hamachi is free for users if they have no more than five computers per network. The paid version offers fast relays and is subject to an annual subscription fee.

For information about subscription types, see [LogMeIn Hamachi Subscription Types](#) on page 9.

## LogMeIn Hamachi Security

All LogMeIn Hamachi communications are encrypted and authenticated with industry-standard algorithms and protocols. Nobody will be able to see the data transmitted between two Hamachi peers. For detailed information, see the [LogMeIn Hamachi Security Whitepaper](#).

### LogMeIn Hamachi and Firewalls

If running a firewall application, you may need to ensure that Hamachi is able to access the Internet.

Please refer to the [LogMeIn Hamachi Knowledge Base](#) for up-to-date information for working with various popular security suites.

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# Installing LogMeIn Hamachi

## Hamachi System Requirements



**Important:** A LogMeIn ID is required to attach Hamachi clients to networks. For details, see [How to Sign up for a LogMeIn ID](#) on page 12.

LogMeIn Hamachi has been tested with the following operating systems:

- Windows Vista (All versions), Server 2008 Standard Edition, Small Business Server 2008
- Windows 7 (All versions), Server 2008 r2 (All versions)
- Windows 8, 8.1 (Desktop UI only)
- Windows 10
- Windows Server 2012
- Mac OS 10.6 (Snow Leopard) or newer on Intel-based Macs
- Linux distributions:
  - Ubuntu 16.04 LTS or newer
  - CentOS 7.2 or newer
- Internet connection



**Note:** Windows RT is not supported.

Gateway Node functionality is not available on the following platforms due to limitations within the operating systems themselves:

- Mac OS
- Windows Small Business Server editions
- Any operating system deployed on Microsoft Azure

## How to Sign up for a LogMeIn ID

Sign up for a LogMeIn ID to use LogMeIn software and services. No obligation. No credit card required.

Your LogMeIn ID provides a single login experience for the following LogMeIn products and services on every platform.

- LogMeIn (client and host)
- Central
- join.me



**Note:** You need to log in separately to LogMeIn Rescue.

1. Go to [www.LogMeIn.com](http://www.LogMeIn.com).
2. Click **Log In** in the upper-right corner.

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The **Log in or sign up** page is displayed.

3. Click **Sign up**.
4. Fill in the registration form and follow all on-screen instructions.  
Upon completing the account form you will be sent a confirmation email.
5. Carefully follow all instructions in the email you receive from LogMeIn regarding account activation.  
Can't find an email from LogMeIn? Check your junk or spam folder.

## How to Install the Client to a Local Computer

Follow this procedure to download and install the Hamachi client to a local computer. The client will be attached to your LogMeIn account.

### On Windows or Mac



**Important:** You must be logged in to the LogMeIn account to which you want to attach the new Hamachi client.

1. On the LogMeIn web site, switch to Network mode and click **Add Client**.  
The **Add Client** page is displayed.
2. Select **Install LogMeIn Hamachi on this computer** and click **Continue**.
3. Click **Install LogMeIn Hamachi**.  
The Hamachi installer is launched.
4. Follow the on-screen instructions.

The client is installed on the local computer as an attached member of the active LogMeIn account. You will be able to manage this client using the LogMeIn website.

### On CentOS (Linux)

Install Hamachi via the command line.

1. Download Hamachi using the terminal.

```
wget http://www.vpn.net/installers/logmein-hamachi-2.1.0.165-1.x86_4.rpm
```

The installer package is downloaded to your current directory.

2. Install the package.

```
sudo yum install logmein-hamachi-2.1.0.165-1.x86_4.rpm
```

The client is installed on the local computer.



**Important:** Before you can connect to a network, you must attach the client to your LogMeIn account.

1. Execute `sudo hamachi login` to log in.
2. Execute `sudo hamachi attach [email@example.com]` using your LogMeIn ID (email address) to attach your client.

---

## On Ubuntu (Linux)

1. **Option 1:** Install Hamachi via the command line.

- a) Download Hamachi using the terminal.

```
wget http://www.vpn.net/installers/logmein-hamachi_2.1.0.165-1_amd64.deb
```

The installer package is downloaded to your current directory.

- b) Install the package.

```
sudo dpkg -i logmein-hamachi_2.1.0.165-1_amd64.deb
```

2. Install the package using the Ubuntu Software app.

- a) Navigate to <http://www.vpn.net/>.
- b) Click the appropriate package to download it.
- c) Open the .deb package with **Software Install**.  
The **Ubuntu Software** window is displayed.
- d) Click **Install**.
- e) When prompted, enter the admin password for elevation.

The client is installed on the local computer.



**Important:** Before you can connect to a network, you must attach the client to your LogMeIn account.

1. Execute `sudo hamachi login` to log in.
2. Execute `sudo hamachi attach [email@example.com]` using your LogMeIn ID (email address) to attach your client.

## How to Deploy the Client to a Remote Computer

Follow this procedure to send an installation link that the recipient can use to download and install the Hamachi client. The client will be attached to your LogMeIn account.



**Important:** You must be logged in to the LogMeIn account to which you want to attach the new Hamachi client.



**Note:** This functionality is not available on Linux.

All defaults set under **Configuration > Client Defaults** will be applied to the new client(s).

1. On the LogMeIn web site, switch to Network mode and click the **Deployment** link.
2. Click **Add New Link**.  
The **Deploy LogMeIn Hamachi to remote computer(s) (Step 1 of 2)** page is displayed.
3. Type a **Description** that you can use to recognize your installation link.
4. In the **Maximum number of remote installations** box type the maximum number of computers that will be able to use the link to install the Hamachi client.  
For example, you may want to send the link to all users in an entire department.
5. In the **Expiration** field you may choose when you want the validity of the link to expire.

6. Select the **Network(s)** that you want the client to be able to access.
7. Click **Continue**.  
The **Deploy LogMeIn Hamachi to remote computer(s) (Step 2 of 2)** page is displayed.
8. Send the link to the recipient(s):
  - Click **Copy** to place the link onto your clipboard for you to paste into an email or instant messaging service message to send to the user(s)
  - Click **Send** to open your default email client with the link in the body of the message for you to send to the user(s)
  - Click **Test** to view the message that will be displayed when the recipient clicks the link

The link is sent to the recipient.

The recipient must click on the installation link to actually install the client on the chosen computer. Once installation is complete, the client can be used to create and connect to Hamachi networks.

## How to Install a Hamachi Client in Client-Only mode

Follow this procedure to download and install the Hamachi client without associating it with a LogMeIn account.



**Important:** Do not log in to your LogMeIn account.



**Note:** Hamachi for Linux is installed in client-only mode by default. To detach a Linux client, see [How to Detach \(Delete\) a Client from Your Account](#) on page 23.

1. Go to the LogMeIn Hamachi product page.
2. Click the **Try it free** link.
3. Do not create a LogMeIn account.
4. Click the **Download Now** link at the bottom of the page.  
The Hamachi installer is launched.
5. Follow all on-screen instructions.  
After the installation is complete, the Hamachi client starts up automatically.

## How to Update the Hamachi Client

This procedure must be executed on the client.

### On Windows or Mac

The Hamachi client software can be updated from the client itself.

By default, the Hamachi client downloads updates automatically when you restart your client or when your client is online for a week. You should download updates manually if you turn off automatic updates.

- To check whether you receive automatic updates, go to **System > Preferences > Settings** and verify that the **Enable automatic update** option is selected.
- To manually download client updates, click **Help > Check for Updates**.

---

## On Linux

Hamachi for Linux can be updated manually.

1. Open the terminal.
2. Execute the following command:

```
sudo hamachi check-update
```

The Hamachi version information is displayed.

3. If your client is not up-to-date, follow the steps in this article: [How to Install the Client to a Local Computer](#) on page 13.



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# Managing LogMeIn Hamachi Clients

## How to Set Default Settings for Deployed Clients

You can enforce the graphic user interface and functionality applied to new clients deployed from LogMeIn Central.

1. On the LogMeIn web site, go to the **Networks > Network Settings** page.
2. Select the **Client Defaults** tab.
3. Select an **Interface Mode**.

Option	Description
<b>Full</b>	The client will offer full functionality to end users.
<b>Restricted</b>	The client will offer a full graphic user interface, but client settings (including the right to change certain settings locally) can be defined on the web only.
<b>Minimal</b>	The client will offer no graphic user interface to the end user. Only the Hamachi system tray icon will be visible. Client settings can be defined on the web only.

4. For Restricted or Minimal mode, select the client settings to apply.

Option	Description
<b>Encryption</b>	Choose this option to provide extra protection against sniffing. For business use, we highly suggest using encryption. Use of this option may cause <i>minimal</i> extra CPU load for both sender and receiver.
<b>Compression</b>	Choose this option to speed up large data transfers. Compression is particularly useful on low bandwidth connections. Use of this option may cause <i>minimal</i> extra CPU load for both sender and receiver.
<b>Can create new network</b>	Allow the client to be used to create new mesh networks.
<b>Can join networks</b>	Allow the client to be used to join networks other than those assigned on the web.
<b>Can chat</b>	Allow the client to be used for chat between Hamachi peers.
<b>Keep chat logs</b>	Allow the client to store chat logs.
<b>Maintain log</b>	Allow the client to store a Hamachi event log.

5. Click **Save**.  
Settings will be applied to all new clients attached to this account.

---

## How to Attach an Unattached Client to a LogMeIn Account

An existing Hamachi client running in Client-only mode can be attached to a LogMeIn account at any time.

### On Windows

This procedure must be executed on the client.

1. On the Hamachi client under the **System** menu, select **Attach to LogMeIn account**.
2. Enter the **LogMeIn Account ID (email address)** of the LogMeIn account to which you want to attach the client.
3. Select **Attach networks** to attach your existing networks to the selected LogMeIn Account.
4. Click **Attach**.

Your relationship with the selected LogMeIn account shows as Pending.

The Account Holder or administrator will see the attachment request on the **Join Requests** page for the specified LogMeIn account. The Account Holder or administrator must approve or deny the request.

All networks that were created on the unattached client are also manageable from your LogMeIn account if they are attached to the account.



**Tip:** Another option is to send an installation link to a user with an unattached client. The user will click the link to reinstall the Hamachi client as an attached member of your account.



**Important:** You cannot attach a network to a web account that was created on an attached client. You must delete the client from the web account first and then reattach it to add all networks that were created on the client.

### On Mac

On a Mac, simply log in to the Hamachi client using the LogMeIn account to which you want to attach the client, as follows:

1. On the Hamachi client, click the Power icon.  
You are prompted to sign up or log in to continue using Hamachi.
2. Click either **Log In** or **Sign Up**, as required.  
Be sure to use the LogMeIn account to which you want to attach the client.  
The Login window is displayed.
3. Enter the information requested.
4. Select either **Login** or **Create Account**, as required.  
Your relationship with the selected LogMeIn account shows as Pending.

The Account Holder or administrator will see the attachment request on the **Join Requests** page for the specified LogMeIn account. The Account Holder or administrator must approve or deny the request.

All networks that were created on the unattached client are also manageable from your LogMeIn account if they are attached to the account.



**Tip:** Another option is to send an installation link to a user with an unattached client. The user will click the link to reinstall the Hamachi client as an attached member of your account.



**Important:** You cannot attach a network to a web account that was created on an attached client. You must delete the client from the web account first and then reattach it to add all networks that were created on the client.

## On Linux

Before you can connect to a network, you must attach the client to your LogMeIn account.

1. Execute `sudo hamachi login` to log in.
2. Execute `sudo hamachi attach [email@example.com]` using your LogMeIn ID (email address) to attach your client.

## How to Rename a Client On the Website

To rename the client from the client itself, see [How to Rename a Client from the Client](#) on page 35.

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the client you want to work with. The **Edit Client** page is displayed.
3. Select the **Name** tab and type a new **Client Name**.
4. Click **Save**.  
If the client is online, changes are applied immediately. If offline, changes are applied when the client comes online.

## How to Add/Remove a Client to/from a Network

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the client you want to work with. The **Edit Client** page is displayed.
3. Select the **Networks** tab. A list of available networks is displayed.
4. Select the networks you want the client to be able to access. Clear the networks that you do not want the client to be able to access.



**Remember:** A client assigned as the gateway in a gateway network cannot be a member of any other network.

5. Click **Save**.  
If the client is online, changes are applied immediately. If offline, changes are applied when the client comes online.



**Tip:** You can also add and remove clients by selecting **My Networks > Edit (for a network) > Add/Remove members**.

## How to Add a Hamachi Mobile Client

The Hamachi mobile client gives you access to Hamachi networks from an iOS or Android smartphone or tablet.

The mobile client is deployed by sending the required VPN settings in a configuration file via email; it is not an app you download from a store.

Follow these steps to configure mobile client settings and send them via email.

1. On the LogMeIn web site, switch to **Networks** and click **Add Client**.  
The **Add Client** page is displayed.
2. Select **Add mobile client** and click **Continue**.
3. Enter a **Client Name** and add the client to a network (optional) and click **Create**.  
The **Edit Client** page is displayed with the new client displayed on the **Mobile** tab.
4. To send the default configuration to an email recipient, enter an email address and click the appropriate button for the user's operating system. Otherwise, change settings before sending.
  - Send iOS
  - Send Other



**Tip:** To preview the configuration file, click **Preview iOS Config** or **Preview Android Config**, as appropriate. This helps you understand what the user sees on their device when configuring their client.

5. Add the client to a network under **Join network**.
  - a) Enter a **Network ID** and **password**.
  - b) Click **Join**



**Important:** A mobile client must be in a network to go online.

6. Under **Connection protocol**, choose how the device will connect to Hamachi servers. Minimum one selection.
  - IPSec
  - PPTP



**Important:** Starting from iOS 10, VPN using PPTP is deprecated and a valid PPTP configuration will not be created. Apple have more information [here](#).

7. Optional connection settings:

Option	Description
<b>Send all traffic over VPN</b>	<p>Valid for all network types.</p> <ul style="list-style-type: none"> <li>• When applied to a gateway network, the gateway peer relays all outside traffic.</li> <li>• When applied to mesh or hub-and-spoke networks, the device's traffic to the public Internet is not relayed by other members. This means the device cannot connect to the Internet.</li> <li>• This setting is always applied to Android devices that use a PPTP connection.</li> <li>• To retain an Internet connection on an Android using PPTP in a mesh network <ul style="list-style-type: none"> <li>• In a mesh network, set the <i>Forwarding Route</i> to 25 . 0 . 0 . 0 / 8.</li> <li>• In a gateway network, the forwarding route must match the client's assigned IP range</li> </ul> </li> </ul>
<b>Set gateway peer to filter broadcast traffic</b>	Filter out network packets not specifically directed to the device.
<b>Enable on-demand connection to these domains</b>	When an iOS device connecting via IPsec attempts to reach a listed domain, the VPN connection will be activated.

8. To save changes to the configuration file, click **Save**.



**Remember:** For iOS, if you change settings after sending the configuration file, you must send a new version.

Once the recipient opens and installs the emailed configuration, the client becomes an attached member of the active LogMeIn account. You will be able to manage this client using the LogMeIn website. The recipient gains access to your shared resources. For example, you can use Hamachi to give mobile users access to your corporate LAN, internal web servers, file servers, etc.

## Setting up an iOS device as a Hamachi mobile client

This procedure assumes you or an administrator has sent configuration details to your device.



**Remember:** The mobile client is deployed by sending the required VPN settings in a configuration file via email; it is not an app you download from a store.

1. **On the device**, install the Hamachi configuration profile.
  - a) Open the email containing the configuration file as an attachment.
  - b) Tap the attachment to open the **Install Profile** page.
  - c) Tap **Install**.
  - d) If prompted, confirm your choice.
2. If prompted to Enter your password for the VPN account "123-456-789", enter the device configuration password **including dashes**, as provided by your administrator or on the **Edit Client** page.  
The message Profile Installed is displayed.
3. To connect, go to **Settings > General > VPN** and choose Hamachi as your VPN.

---

If you are not a member of any Hamachi network, you may see the following error: The VPN server did not respond.



**Important:** Starting from iOS 10, VPN using PPTP is deprecated and a valid PPTP configuration will not be created. Apple have more information [here](#).

## Setting up an Android device as a Hamachi mobile client

This procedure assumes you or an administrator has sent configuration details to your device.



**Remember:** The mobile client is deployed by sending the required VPN settings in a configuration file via email; it is not an app you download from a store.

1. On the device, open the email containing the following three files as attachments.
  - **PFX** The client certificate.
  - **CA** Issuer of the client certificates.
  - **RootCA** Self-signed root certificate.
2. Save all attachments and locate them on the device.

**No attachments?** When the connection type is PPTP, no certificates are attached. Certificates are attached only with IPSEC.
3. Extract the Hamachi client certificate, file type **PFX**, as follows:
  - a) Tap the file.
  - b) When prompted to enter a password to extract the certificate, enter the device configuration password (for example, abcd-a1b2-c1d2). Include dashes. Case sensitive.
  - c) Name the certificate.
4. Install both the Hamachi CA and RootCA certificates, as follows:
  - a) Tap the files.
  - b) Name the certificates. The names need not match the name used in step 3.
5. Add a VPN profile for Hamachi for each connection protocol (IPSec and PPTP), as follows:
  - a) Go to **Settings > More settings > VPN**
  - b) Tap **Add VPN Network**.
6. Connect.

**No Internet Connection?** To retain an Internet connection on an Android using PPTP:

- In a mesh network, set the Hamachi VPN profile *Forwarding Route* to 25.0.0.0/8
- In a gateway network, the *Forwarding Route* must match the client's assigned IP range

## How to Change the Client Interface



**Note:** This functionality is not available on Linux.

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the client you want to work with. The **Edit Client** page is displayed.
3. Select the **Settings** tab.
4. Select an **Interface Mode**.

Option	Description
<b>Full</b>	The client will offer full functionality to end users.
<b>Restricted</b>	The client will offer a full graphic user interface, but client settings (including the right to change certain settings locally) can be defined on the web only.
<b>Minimal</b>	The client will offer no graphic user interface to the end user. Only the Hamachi system tray icon will be visible. Client settings can be defined on the web only.

5. For Restricted or Minimal mode, select the client settings to apply.

Option	Description
<b>Encryption</b>	Choose this option to provide extra protection against sniffing. For business use, we highly suggest using encryption. Use of this option may cause <i>minimal</i> extra CPU load for both sender and receiver.
<b>Compression</b>	Choose this option to speed up large data transfers. Compression is particularly useful on low bandwidth connections. Use of this option may cause <i>minimal</i> extra CPU load for both sender and receiver.
<b>Can create new network</b>	Allow the client to be used to create new mesh networks.
<b>Can join networks</b>	Allow the client to be used to join networks other than those assigned on the web.
<b>Can chat</b>	Allow the client to be used for chat between Hamachi peers.
<b>Keep chat logs</b>	Allow the client to store chat logs.
<b>Maintain log</b>	Allow the client to store a Hamachi event log.

6. Click **Save**.  
If the client is online, changes are applied immediately. If offline, changes are applied when the client comes online.

## How to Detach (Delete) a Client from Your Account

You can detach a client from your LogMeIn account and remove it from all networks in your account. The Hamachi client software will remain installed on the local computer.

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the client you want to work with. The **Edit Client** page is displayed.

3. Select the **Delete** tab.
4. Click **Remove Client**.  
The client is detached from your account.

## Using Tags to Help Manage Clients in Your Account

Add tags to Hamachi clients to help manage a complex account.

A tag is a label associated with a client. Tags help you identify and search for clients, but are not used in reporting or otherwise.



**Tip:** Once you have tagged your clients, use the **Search Clients** box to locate them.

### Tagging Example

Assume you are a service provider managing multiple Hamachi clients for a large company. You want to categorize deployed clients according to department, so you add a tag to each client depending on the department to which the end user belongs.

- Tag each client used by a member of Marketing as "Marketing"
- Tag each client used by a member of Sales as "Sales"
- Tag each client being used by a member of Operations as "Ops"

When you need to locate a computer, type a tag name in the **Search Clients** box to find all clients appropriately tagged clients.

## How to Create and Manage Tags

1. On the LogMeIn web site, go to the **Networks > Network Settings** page.
2. Select the **Tags** tab.
3. Click **Add New Tag**.  
The **Add New Tag** dialog box is displayed.
4. Type a **Tag name** and click **OK** or **Save**.  
The new tag is saved.



**Tip:** You can also work with tags by selecting **Networks > My Networks > Edit Client > Edit Tags**.

## How to Assign Tags to a Client

You can assign multiple tags to a single Hamachi client.

1. On the LogMeIn web site, go to the **Networks > My Networks** page.  
Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the client you want to work with.  
The **Edit Client** page is displayed.
3. Select tags from the list and click **Save**.



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## Using the LogMeIn Hamachi Client

The term Hamachi client refers to both the Hamachi software itself and any computer or smartphone with Hamachi client software installed. With proper permission from network owners, Hamachi clients can become members of any Hamachi network.

### How to Join an Existing Network

This procedure must be executed on the client.

Depending on the settings of the individual Hamachi networks, the owner of the network may have to approve your request before you can join.

#### On Windows and Mac

1. Select **Network > Join an existing network**.
2. Type the network ID and password of the network.
3. Click **Join**.

##### Where do I find my network ID?

If you created a network on the client, your network ID and network name are the same. You find your network ID by hovering the mouse over the network's name.

If you created a network on the web, you find your nine-digit network ID by clicking **Edit** next to the network's name.

#### On Linux

1. Open the terminal.
2. Execute the following command:

```
sudo hamachi join <network ID>
```

##### Where do I find my network ID?

See the following article for details: [Hamachi for Linux Fundamentals](#) on page 40.

### How to Chat in a Network

- 1.
2. The **Chat** window appears. The header of the window displays the name of the member or group with whom you chat.
3. Use the lower pane of the window to write messages and press **Enter** to send them.

##### What else can I do during chat?

During a chat session, to access the following options:

Menu item	Description
<b>Upper pane</b>	
Copy	Copies a selected text from the <b>Chat</b> window to the clipboard.
Clear chat history	Clears the upper pane of the <b>Chat</b> window.
<b>Lower pane</b>	
Paste	Inserts text from the clipboard to the lower pane of the <b>Chat</b> window.
Paste and send	Inserts text from the clipboard and sends that text to the other parties of the chat session.
Clear	Clears the lower pane of the <b>Chat</b> window.

## How to Send an Instant Message on a Windows Client

An Instant Message (IM) sends the content of your clipboard to the selected peer, similarly to the **Paste and send** option in the **Chat** window.

Ensure that your clipboard contains text that you want to send to another peer.

This procedure must be executed on the client.

1. On the client, right-click on the network member that you want to send an IM.
2. Click **Send Quick IM**.

Sending an IM does not open the chat window, it only sends a notification to the peer.

## How to Appear Online or Offline to Other Network Members

This procedure must be executed on the client.

### On Windows and Mac

1. On the client, right-click on the network in which you want to change your status.
2. Click **Go offline** or **Go online** depending on your original status.

You go online/offline in the chosen network. Other network connections are not impacted.



**Note:** To display the status of the client, see [How to Change the Advanced Interface Settings](#) on page 30.



**Note:** An offline client can read chat sessions, but cannot communicate with network members.

---

## On Linux

1. Open the terminal.
2. Execute the following command:

Option	Description
Go online	<code>sudo hamachi go-online &lt;network ID&gt;</code>
Go offline	<code>sudo hamachi go-offline &lt;network ID&gt;</code>

You go online/offline in the chosen network. Other network connections are not impacted.

## What do the Different Color Indicators Mean in LogMeIn Hamachi?

A circle in front of each peer on your Hamachi list is a status indicator.



**Note:** This functionality is not available on Linux.

The color of this indicator reflects the status of the connection between you and a peer.

Color	Description
grey	The peer is offline.
blinking green	The client is trying to establish connection to the peer.
solid green	There is a direct link between the client and the peer.
blue	There is a relay tunnel between the client and the peer. You may have to set a static TCP or UDP port for Hamachi to use. This is generally necessary when you have a computer behind a router or NAT device and its support of NAT is poor. In this case, you should set up a static port forward on the router/NAT, and then fix a static port in Hamachi. For information about setting up a port forward rule, see <a href="http://www.PortForward.com">www.PortForward.com</a> .
red	Traffic is blocked between the client and the peer. Right-click on the peer to find out why communication is blocked.

## Securing Your Hamachi Network Connections

Security in Hamachi defines how other peers can connect to your client through authorization and authentication settings.

To establish a secure connection with another peer, it is essential to authenticate that peer. Hamachi provides two means of authentication: password protection and using RSA keys.

---

## How to Password Protect Your Network

Password protection implies that peers must share the network password through a different medium to be able to establish a connection. For information on how to enable password protection on the LogMeIn website, see [How to Change Network Password Settings](#) on page 47.

## How to Protect Your Network with RSA Keys

A peer can authenticate itself towards a network with its RSA key, which can be managed from the client interface. The authentication status of peers is **trusted (auto)** by default. This means that peers can interact with each other since the client automatically authenticates and trusts the connecting peer.

You can manually authenticate peers by blocking new network members from establishing connection to your client.



**Note:** This functionality is not available on Linux.

1. Go to the **System > Preferences > Security** tab.
2. Choose the **Block new network members by default** option.  
The status of a blocked network member becomes **unverified**.
3. Authenticate the peer, for example by asking him to send you his public RSA key.  
Chatting with untrusted peers is possible in Hamachi, but you cannot establish a network connection to them.
4. Right-click on the name of the peer and select **Trust > Trusted**.

## How to Establish a Connection to All Unverified Peers



**Important:** We do not recommend that you establish a VPN connection to unverified peers.

Even if a peer is unverified, you can manually override the security settings and establish a connection. You can authorize the connection globally or only to a single unverified peer.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings. If this link is not available, you already view the advanced settings.
3. In the **Peer Connections** section, change the **Traffic filtering** option to **block unsecured** or **allow all**.



**Important:** We do not recommend that you allow connection to all peers.

4. Click **OK** or **Apply** to save your settings.

Once you change the traffic filtering settings, you must restart your client.

## How to Establish a Connection to a Single Unverified Peer

1. Right-click on the peer whose connection you want to allow and click **Details**.
2. On a Windows client, on the **Settings** tab, click the **change** link next to the **Traffic** setting.
3. Choose the **Block unsecured** or the **Allow all** option.



**Important:** We do not recommend that you allow connection to all peers.



**Important:** The traffic filtering setting of a peer overrides the global traffic filtering settings. To change the global traffic filtering settings, see [How to Change Peer Connection Settings](#) on page 32.

## How to Check the Network Connection of Another Online Client

Check the network connection of a peer if you experience time lag.

This procedure must be executed on the client.

1. On the client, right-click on the peer whose network connection you want to check.
2. Click **Ping** or **Ping [Client ID]**.



**Note:** [ClientID] stands for the Hamachi client ID of the peer.

A command prompt opens.

3. Once you have checked the network connection, press **Ctrl+C** to quit the command prompt.



**Note:** The **Ping [Client ID]** option requires Windows 7, 8, or Mac OS X 10.5 or later.

## How to Manage the Preferences of Clients

By managing the preferences of a client, you can change the appearance of the graphic user interface and enable functionality that you cannot manage from your LogMeIn account.

This procedure must be executed on the client.



**Note:** This functionality is not available on Linux.

- 1.
2. Select the tab page that you want to view.
  - The **Status** tab displays basic information on the client, such as name, ID, and version information. You can change the name of the client by clicking **change** next to the name of the client.
  - The **Security** tab displays the peers that have established a connection to the client at any point in time. To change the status of the peers, right-click on the name of the peer and select the appropriate status from the **Trust** menu. You can also block new members from joining a network that was created on the client. This tab page is only available for clients running in full mode. For more information, see [Securing Your Hamachi Network Connections](#) on page 27.
  - The **Settings** tab manages the appearance and functionality of the client.
3. Click **OK** or **Apply** to save your settings.

---

## How to Change Basic Settings



**Note:** By default you have the basic settings shown on the Settings tab with an "Advanced Settings" link at the bottom. The "Basic Settings" is visible only if one has already switched to advanced.

1.

2.

Option	Description
<b>Show splash screen on startup</b>	Choose this option to display the Hamachi logo when Hamachi is started.  (Windows only)
<b>Hide offline network members</b>	An offline network member is listed on the client with its name grayed out. Choose this option to hide offline peers.
<b>Enable chat</b>	Choose this option to enable peer and group chat.

3. Click **OK** or **Apply** to save your settings.

## How to Change the Advanced Interface Settings

This procedure must be executed on the client.



**Note:** This functionality is not available on Linux.

1.

2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find these options in the **Interface Settings** section.

Option	Description
<b>Show splash screen on startup</b>	Choose this option to display the Hamachi logo when Hamachi is started.  (Windows only)
<b>Show main window in the taskbar</b>	Choose this option to display the main Hamachi window on the taskbar.  (Windows only)
<b>Show peer windows in the taskbar</b>	Choose this option to display the <b>Peer Properties</b> window on the taskbar once you right-click on a peer and click <b>Details</b> .  (Windows only)
<b>Show chat windows in the taskbar</b>	Choose this option to display the chat windows on the taskbar.  (Windows only)

Option	Description
<b>Confirm evicting a network member</b>	Choose this option to ask for confirmation if you evict a peer from an unattached network. This option is only available for clients running in full mode.
<b>Warn when approaching network limit</b>	Choose this option to display a message when you can only add two or less members to your network. For example, if you have a standard Hamachi subscription, this message appears when your network has 30 or 31 members.
<b>Warn when network limit exceeded</b>	Choose this option to display a message when you reach the member limit of your network.
<b>Hide offline network members</b>	Choose this option to hide network members if they go offline.
<b>Peer label format</b>	Select the format of peers' names as they appear on the client. If you select <b>custom</b> , you must define it in the <b>Custom format</b> field. This option is only available for clients running in full mode. To see which custom variables are available, see <a href="#">List of Custom Variables</a> on page 31.
<b>Peer double-click action</b>	Select the action that is performed if you double-click on a peer's name. This option is only available for clients running in full mode.
<b>Show Quick IM in peer's menu (Windows only)</b>	Choose this option to display the <b>Send Quick IM</b> option if you right-click on a peer.
<b>Show custom command in peer's menu</b>	Choose this option to add a custom command to a peer's menu. The command is displayed as defined in the <b>Label</b> field and issues the command that the <b>Command</b> field contains. For example, you can define remote desktop as a custom command by entering <code>mstsc /v:\$VIP4</code> (connecting via IPv4) or <code>mstsc /v:\$VIP6</code> (connecting via IPv6) in the <b>Command</b> field and name it in the <b>Label</b> field as Remote Desktop. Once you right-click in a peer, you can choose the Remote Desktop option to establish a remote session with the selected peer. This option is only available for clients running in full mode. For the full list of custom variables and how to use them, see <a href="#">List of Custom Variables</a> on page 31.

3. Click **OK** or **Apply** to save your settings.

### List of Custom Variables

Use variables to define custom commands and set the format of peers' names as they appear on the client.

Variable	Description
\$ID	Peer ID
\$NICK	Peer name
\$PING	Peer ping time
\$RX	Number of bytes received*
\$RX_LOSS	Number of inbound packets lost*

Variable	Description
\$RX_SPEED	Reception speed*
\$TX	Number of bytes transmitted*
\$TX_LOSS	Number of outbound packets lost*
\$TX_SPEED	Transmit speed*
\$VIP	Tunneled IP on the Hamachi network (both IPv4 and IPv6)
\$VIP4	Tunneled IP on the Hamachi network (IPv4 only)
\$VIP6	Tunneled IP on the Hamachi network (IPv6 only)
\$IPALIAS	Peer IP aliases
\$IP	Peer IPv4 address

\* The value is also shown in the **Peer Properties** dialog. Right-click a client and select **Details** to display.

## How to Change the Server Connection Settings

Server connections allows you to set up the Hamachi server that your client connects to. Server connection parameters can only be modified for clients running in full mode.

This procedure must be executed on the client.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find these options in the **Server Connection** section.

Option	Description
<b>Server address</b>	Specify the IP address of the server that you want to access.
<b>Local address</b>	Specify an IP address and a port for accessing the Hamachi server. Choose this option if your firewall restricts outgoing traffic to a selected number of ports.
<b>Use proxy</b>	Choose this option to use a proxy server for establishing a network connection. If you set this option to <b>Yes</b> , you must define the IP address, username, and password for the proxy server. To remember the password for the proxy server, choose the <b>Remember password</b> option.
<b>Automatically detect settings (Windows only)</b>	Choose this option to detect the proxy settings automatically.

3. Click **OK** or **Apply** to save your settings.

## How to Change Peer Connection Settings

Use the Peer connections settings to set up how network members connect to your client. These connection parameters can only be modified for clients running in full mode.

This procedure must be executed on the client.



- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find these options in the **Peer Connections** section.

Option	Description
<b>Authentication</b>	Select the authentication method of peers.
<b>IP protocol mode</b>	<p>Select the type of Internet protocol that you want to use to communicate with other peers. You have the following options:</p> <ul style="list-style-type: none"> <li>• <b>IPv6 only</b></li> <li>• <b>IPv4 only</b></li> <li>• <b>Both</b> (default)</li> </ul> <p>The following limitations are applied when using <b>IPv6 only</b> mode:</p> <ul style="list-style-type: none"> <li>• Windows XP does not support IPv6 by default. If you select the <b>IPv6 only</b> or <b>Both</b> option, you will be asked to install and enable the IPv6 functionality in Windows.</li> <li>• Clients can only establish a Hamachi tunnel to ping or browse a peer if both clients allow the use of the same IP protocol mode. For example, if client A uses <b>IPv6 only</b> mode then client B must use either <b>Both</b> or <b>IPv6 only</b> protocol mode to communicate. This limitation does not effect chat and instant messaging.</li> <li>• IPv6-enabled Mac clients can only browse in AFP mode.</li> </ul>
<b>Encryption</b>	Choose this option to provide extra protection against sniffing. For business use, we highly suggest using encryption. Use of this option may cause <i>minimal</i> extra CPU load for both sender and receiver. This option is only available for clients running in full mode.
<b>Compression</b>	Choose this option to speed up large data transfers. Compression is particularly useful on low bandwidth connections. This option is only available for clients running in full mode.
<b>Traffic filtering</b>	Choose this option to block incoming traffic from peers. You can block untrusted, not secured, all, and no traffic.
<b>Local UDP address</b>	Define an optional UDP address that you want to use for connection to other peers.
<b>Local TCP address</b>	Define an optional TCP address that you want to use for connection to other peers.
<b>Enable mDNS name resolution</b>	Choose this option to enable multicast DNS support that can resolve IP conflicts.
<b>Enable LLMNR name resolution</b>	Choose this option to enable Link-Local Multicast Name Resolution (LLMNR) that provides an additional method to resolve the names of computers on a network without a DNS server.

3. Click **OK** or **Apply** to save your settings.

## How to Change Your Online Presence

Online presence displays whether the online user is available in the network.

---

This procedure must be executed on the client.



**Note:** This functionality is not available on Linux.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find these options in the **Online Presence** section.

Option	Description
<b>Enable</b>	Choose this option to display and be able to modify the online presence of your client. You can change your presence in the <b>Status</b> menu on the Hamachi client.
<b>Show peer status in the main list</b>	Choose this option to display the online presence of other network members. You can only view the presence of those members who have enabled their online presence.
<b>Switch to Away mode (Windows only)</b>	Choose this option if you want to change your status automatically to Away after a defined period of time. You can set this time in the <b>after being idle for</b> field.

3. Click **OK** or **Apply** to save your settings.

You can define a custom online presence in the **Status > Custom** menu.

## How to Change Chat Settings

This procedure must be executed on the client.



**Note:** This functionality is not available on Linux.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find these options in the **Chat Settings** section.

Option	Description
<b>Enable chat</b>	Choose this option to enable peer and group chat.
<b>When new message arrives</b>	Select whether Hamachi should open the chat window or display a system message on the system tray when you receive a new message.
<b>Play a sound when new IM arrives (Windows only)</b>	Choose this option to play a sound when you receive an instant message.
<b>Send 'Typing...' notifications</b>	Choose this option to display a notification in the <b>Chat</b> window when the other party is writing a message.
<b>Keep chat messages</b>	Choose this option to keep the history of chat messages. Loading the chat history in the <b>Chat</b> window will fail unless this option is enabled.

3. Click **OK** or **Apply** to save your settings.

## How to Change Colors in the Chat Window

This procedure must be executed on the client.



**Note:** This functionality is not available on Linux.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find this option in the **Chat Colors** section.

Option	Description
<b>Panes and messages</b>	Define a color for each pane and message type.

3. Click **OK** or **Apply** to save your settings.

## How to Rename a Client from the Client

This procedure must be executed on the client.

- 1.
2. On the **Status** tab, click **Change** next to the client name.
3. Enter the new client name.
4. Click **Change** to save your settings.



**Note:** On Linux, you can change the nickname of the client you are using from the command line by executing the following command:

```
sudo hamachi set-nick <nickname>
```

## How to Update the Client Automatically

This procedure must be executed on the client.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find this option in the **Software updates** section.

Option	Description
<b>Enable automatic update</b>	Choose this option to automatically download the latest version of the Hamachi client.

3. Click **OK** or **Apply** to save your settings.



**Tip:** On Linux, use the `sudo hamachi check-update` command to check for updates. This doesn't automatically update your client though, follow the steps in this article do so: [How to Install the Client to a Local Computer](#) on page 13.

## How to Find Configuration and Installation Directories

You can view and edit the Hamachi client settings in the Hamachi configuration files as well. Only those clients can view these directories that are running in full mode.

This procedure must be executed on the client.



**Tip:** On Linux, service configuration file (`h2-engine.cfg`) are located at `/var/lib/logmein-hamachi`.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find these options in the **Disk Locations** section.

Option	Description
<b>Installation folder</b>	Displays the path of your Hamachi installation.
<b>Service configuration</b>	Defines the path of the Hamachi network configuration file, <code>h2-engine.cfg</code> .
<b>UI configuration</b>	Defines the path of the user interface configuration file, <code>h2-ui.cfg</code> .
<b>Chat messages</b>	Defines the path of your saved chat messages. Messages are only saved in this folder if the <b>Keep chat messages</b> option is enabled in the <b>Chat Settings</b> section.

3. Click **OK** or **Apply** to save your settings.

## How to Collect Information for Troubleshooting

Logs help LogMeIn support technicians to find a solution for problems with Hamachi clients.


This procedure must be executed on the client.



**Tip:** On Linux, log files are located at `/var/lib/logmein-hamachi`.

- 1.
2. On the **Settings** tab, click the **Advanced settings** link at the bottom of the page to view the advanced settings and select from the following options. You can find these options in the **Troubleshooting** section.

Option	Description
<b>Enable diagnostic log</b>	Choose this option to log the activity of the Hamachi client. You can only turn off logging on clients running in full mode.

Option	Description
Log file	Define the path of the log file.
	 <b>Tip:</b> Once you enable logging, Hamachi writes logs into the same file. You may want to check the size of your log file periodically to make sure that it does not take up too much disk space.

3. Click **OK** or **Apply** to save your settings.

## How to Disable Port Detection for Peer-to-Peer Connection

This procedure must be executed on the client.



**Note:** This functionality is not available on Linux.

- 1.
2. Click the **Settings** tab. You can find this option in the **Troubleshooting** section.

Option	Description
Disable UPnP	Choose this option to disable automatic port detection for establishing peer-to-peer connection with other Hamachi clients. If Hamachi cannot establish a peer-to-peer connection, it will attempt to use a relay tunnel with other peers .

3. Click **OK** or **Apply** to save your settings.

## How to Backup and Restore Hamachi Client Configuration

You can backup your configuration files to recover from a system failure, or to have the ability to move a client and all its network configuration to a new computer.

### On Windows

This procedure must be executed on the client.

### How to Backup Configuration Files

- 1.
2. Select **Service configuration** in the **Disk Locations** section.
3. Click **Open**.
4. Copy all files to a safe location.

### How to Restore Configuration Files

Do not go Online when you install Hamachi on the new or reformatted computer.

1. Open the service configuration directory. See [How to Backup Configuration Files](#) on page 37.
2. Open the **Run** window:

- On Windows XP, go to **Start > Run**
  - On Windows 7, 8, and Vista, go to **Start** and type `run` in the **Search** field
3. In the **Run** window, type `services.msc`.
  4. Right-click on **LogMeIn Hamachi Tunneling Engine** and select **Stop**.
  5. Go back to the service configuration directory and copy the backed up files to the service configuration directory.
  6. In the Services window, right-click on **LogMeIn Hamachi Tunneling Engine** and select **Start**.
  7. When the client goes online, it will retain its original identity.

### On Linux

1. Open the terminal.
2. Stop the Hamachi service with the following command:

```
/etc/init.d/logmein-hamachi stop
```

3. Navigate to `/var/lib/logmein-hamachi`, the Hamachi configuration directory.
  - To backup your settings, copy the contents to safe location.
  - To restore your settings, copy the backed up files to the configuration directory.

4. Start the Hamachi service with the following command:

```
/etc/init.d/logmein-hamachi start
```

## Managing Unattached Networks from the Client

Most features of unattached networks are identical to that of attached networks. However, there are a number of features of Hamachi that are only available for networks that were created by unattached clients:

- Set network access
- Delete a network
- Evict a member from a network

### How to Set Access for an Unattached Network

Setting access rights is only possible if the client is the owner of the network. This means that the network was created from the client.

#### On Windows or Mac

- 1.
2. Click **Set Access**.
3. Set the necessary access rights as follows:

Option	Description
<b>Do not accept new network members</b>	Select this option if you do not want to extend your network with new members.

Option	Description
<b>Require a password to join the network</b>	Joining members must enter the correct password to be able to join the network. By default, this option is enabled. To set a password, click <b>Set Password</b> and follow the on-screen instructions.
<b>Approve all new members manually</b>	The user must approve the membership of all new members.

- Click **OK** or **Apply** to save your settings.

### On Linux

- Open the terminal.
- Execute the following command with the flags specified below:

```
sudo hamachi set-access <network ID> [flags]
```

Flag	Description
<b>lock</b>	Set this flag if you do not want to extend your network with new members.
<b>unlock</b>	Set this flag if you do not want to allow new members to join your network.
<b>Require a password to join the network</b>	To set a password, click <b>Set Password</b> and follow the on-screen instructions.
<b>manual</b>	The user must approve the membership of all new members.
<b>auto</b>	New members are approved automatically.

By default, joining members must enter the correct password to be able to join the network. To change or set a password, execute the following command:

```
sudo hamachi set-pass <network ID> [password]
```

## How to Delete an Unattached Network

### On Windows or Mac

This procedure must be executed on the client.

- On the client, right-click on the network that you want to delete.
- Click **Delete network**.
- Confirm that you want to delete the selected network.



**Note:** Members are not notified about the removal of the network, but the network disappears from their clients.

### On Linux

- Open the terminal.

2. Execute the following command:

```
sudo hamachi delete <network ID>
```

## How to Evict a Member of an Unattached Network

### On Windows and Mac

This procedure must be executed on the client.

1. On the client, right-click on the network member that you want to remove from the network.
2. Click **Evict**.
3. Confirm that you want to remove the selected network member.

### On Linux

1. Open the terminal.
2. Execute the following command:

```
sudo hamachi evict <network ID> <client ID>
```

## Hamachi for Linux Fundamentals

Get started with Hamachi for Linux.

Hamachi for Linux comes with a different feature set than Hamachi For Windows. To check a particular feature, refer to the articles in this guide.



**Note:** You must have administrator privileges to run Hamachi commands.

### First Steps

Before you can connect to a network, you must attach the client to your LogMeIn account.

1. Execute `sudo hamachi login` to log in.
2. Execute `sudo hamachi attach [email@example.com]` using your LogMeIn ID (email address) to attach your client.

### Hamachi Essentials

Task	Bash Command
Log into your LogMeIn account and go online	<code>sudo hamachi login</code>
Attach the client to your LogMeIn account using your LogMeIn ID (email address)	<code>sudo hamachi attach [email@example.com]</code>
Display the details and the current status of the client	<code>sudo hamachi</code>
List available networks in your account and your peers.	<code>sudo hamachi list</code>



Task	Bash Command
<ul style="list-style-type: none"> <li>• Networks, where your client is online, are marked with an asterisk (*).</li> <li>• For online peers additional information is displayed, such as IP address.</li> </ul>	
Display network information	<code>sudo hamachi network &lt;network ID&gt;</code>
See a complete list of available Hamachi commands, such as joining, creating or leaving networks, among others.	<code>sudo hamachi help</code>

## FAQ

### Which distributions are supported?

See the following article for details: [Hamachi System Requirements](#) on page 12.

### Does Hamachi for Linux come with a user interface (GUI)?

No, Hamachi is bash (command-line) only.

---

# Managing LogMeIn Hamachi Networks

## How to Set the Default Response to Network Join/Exit Requests

Network defaults are automatically applied to all new networks in your account. Default settings are not applied to networks that join your account.

1. On the LogMeIn web site, go to the **Networks > Network Settings** page.
2. Select the **Network Defaults** tab.
3. Select a **Network type**.
4. Select the default response to join requests.

Option	Description
<b>Accept automatically</b>	All requests to join the network will be accepted automatically. We recommend that you require a network password when using this option.
<b>Must be approved</b>	All requests to join the network must be approved on the web.
<b>Members can be added on the web only</b>	Clients will not be able to join the network from the client. Clients can be added to the network on the web only.

5. Under **Network Member Permissions**, select **Can leave network at will** to allow members to leave the network at any time. By disabling this option, you can prevent clients from leaving a network accidentally or upon connection failure.
6. Click **Save**.

## How to Add a Hamachi Network

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Add Network**. The **Add Network (Step 1)** page is displayed.
3. Name the network in the **Network name** field. Use the network name to help identify the network.
4. Select a **Network type**. See [LogMeIn Hamachi Network Types](#) on page 7.



**Important:** Once a network is created, its network type cannot be changed.

5. Enter a **Network description** (optional).
6. Click **Continue**.

---

The **Add Network (Step 2)** page is displayed.

7. Select the default response to join requests.

Option	Description
<b>Accept automatically</b>	All requests to join the network will be accepted automatically. We recommend that you require a network password when using this option.
<b>Must be approved</b>	All requests to join the network must be approved on the web.
<b>Members can be added on the web only</b>	Clients will not be able to join the network from the client. Clients can be added to the network on the web only.

8. Under **Network password**, select **A password is required to join this network** to protect your network.



**Tip:** If you do not set a password, we recommend setting the Join Request behavior to **Must be approved** or **Members can be added on the web only**.

9. Click **Continue**.  
The **Add Network (Step 3)** page is displayed.
10. Follow the on-screen instructions.
11. Click **Finish**.  
Your network is created with a system-generated Network ID.



**Note:** When you assign a gateway, you will lose your network connection for a few seconds while the Hamachi virtual network adapter bridges to the physical network adapter.

## How to Configure a Hamachi Gateway on Windows to Recognize Multiple Subnets

Provide access to a network with multiple subnets via a Hamachi gateway.

By default, the client set as the gateway in a Hamachi gateway network will provide access to its own subnet (the one on which it is installed).

Follow this procedure to set an existing gateway to recognize additional subnets that are accessible from the gateway's subnet:

1. Open the Windows client that is set as the gateway.
2. Right-click the gateway network and select **Gateway settings** from the menu.  
The Gateway Settings dialog box is displayed.
3. Select the **Remote Networks** tab.
4. Click **Add** to add new remote networks.  
The Network Subnet dialog box is displayed.
5. Enter the **Network address** and **Subnet mask** in dotted decimal format.
6. Click **OK** or **Apply** to save your settings.

Members of the gateway network will be able to access resources on all recognized subnets.

---

## How to Assign an IP Range for Gateway Members on Windows

Gateway members are assigned an IP address by the DHCP server in your gateway's LAN. If no DHCP server is present, the gateway must be configured to behave as a quasi-DHCP server and assign addresses from a defined range.

1. Open the Windows client that is set as the gateway.
2. Right-click the gateway network and select **Gateway settings** from the menu. The Gateway Settings dialog box is displayed.
3. Select the **IP Parameters** tab.
4. Clear the **Obtain IP settings automatically** box.
5. Under **Address range**, enter the appropriate addresses.




**Important:** You must complete each field under **Address range**.


6. If you have a DNS server(s) in the network, you may enter their IP addresses and define a DNS suffix.
7. Click **OK** or **Apply** to save your settings.

## How to Configure Home LAN Behavior for Gateway Network Members

Control how gateway network members should behave when they are physically located in the same network as the gateway (the "Home LAN").

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the network you want to work with. The **Edit Network** page is displayed.
3. Select the **Settings** tab.
4. Under **Home LAN Behavior**, select one of the following options:

Option	Description
<b>Disable members going online in the host network</b>	Authentication errors may occur if a client logs in to a gateway network from a Hamachi network and a physical network IP address. Choose this option to prevent members from going online to the gateway when they are physically located in the same network as the gateway. All network resources remain available through the physical network.   <b>Tip:</b> Ensure that ICMP traffic on the gateway is not blocked by a firewall.
<b>Disable network stack components</b>	Choose this option to allow members to go online to the gateway when they are physically located in the same network as the gateway. When this option is selected, the stack components of the Hamachi network adapter are turned off. This resolves potential conflicts by preventing the operating system from attempting to authenticate through the Hamachi adapter toward the domain controller. Members go online in the gateway network. All local network resources remain available through both the physical and the Hamachi network. This option is useful if a user has limited access to the physical network resources but can have unlimited access to the same resources through the Hamachi network.

Option	Description
<b>Do not restrict members</b>	<div data-bbox="570 247 607 304" style="display: inline-block; vertical-align: middle;"></div> <div data-bbox="626 268 1370 325" style="display: inline-block; vertical-align: middle;"> <p><b>Tip:</b> Ensure that ICMP traffic on the gateway is not blocked by a firewall.</p> </div>
	<p>Choose this option to allow members to attempt to go online when they are physically located in the same network as the gateway. If you experience authentication problems, choose one of the above options.</p>

5. Click **Save**.

## How to Add a Hamachi Network from the Client

### On Windows or Mac

This procedure must be executed on the client.

1. Click **Network > Create a new network**.
2. Type the network ID and password of the network.
3. Click **Create**.

### On Linux

1. Open the terminal.
2. Execute the following command:

```
sudo hamachi create <network ID> [password]
```

## How to Rename a Network

Use the network name to help identify the network.



**Important:** When joining a network from a client, use the system-generated network ID. The network ID cannot be changed.

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the network you want to work with. The **Edit Network** page is displayed.
3. On the **Members** tab, type a new name in the **Name** field.
4. Click **Save**.  
If the client is online, changes are applied immediately. If offline, changes are applied when the client comes online.



**Important:** You cannot rename an unattached network that was created from the client.

## How to Approve or Reject Join Requests

If you receive a request from another client to join your network, you can approve or reject that request. A request is automatically rejected if you do not approve it in two weeks.

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. You will see the following message when you have requests from clients waiting to join your account or networks: **You have x pending join requests**. Click the **pending join request** link. The Join Requests page is displayed.
3. Choose **Accept** or **Reject**, as appropriate.
4. Click **Save**.



**Note:** You may not be able to accept new members if your Hamachi subscription expires or if you reach the member limit of your network. See also [LogMeIn Hamachi Network Types](#) on page 7.



**Tip:** Are you on Linux? You can approve or reject requests from the command line with the following commands:

```
sudo hamachi approve <network ID> <client ID>
```

```
sudo hamachi reject <network ID> <client ID>
```

## How to Edit Network Settings

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the network you want to work with. The **Edit Network** page is displayed.
3. Select the **Settings** tab.
4. Type a **Welcome message** (optional). This message will be displayed to any client joining the network for the first time.
5. Type an **Announcement message** (optional). This message will be displayed when an existing member logs in to the network. Members also receive the announcement whenever it is updated.
6. Select the default response to join requests.

Option	Description
<b>Accept automatically</b>	All requests to join the network will be accepted automatically. We recommend that you require a network password when using this option.
<b>Must be approved</b>	All requests to join the network must be approved on the web.
<b>Members can be added on the web only</b>	Clients will not be able to join the network from the client. Clients can be added to the network on the web only.

- Under **Network Member Permissions**, select **Can leave network at will** to allow members to leave the network at any time. By disabling this option, you can prevent clients from leaving a network accidentally or upon connection failure.
- Click **Save**.

## How to Modify the Client's Role in a Network

- On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
- On the **My Networks** page, click **Edit** next to the network you want to work with. The **Edit Network** page is displayed.
- Click **Add/Remove Members**.
- Change member settings as follows:
  - Hub or spoke for a hub-and-spoke network (multiple hubs are allowed)
  - Gateway or member for a gateway network (one gateway node only)
  - Member for a mesh network



**Remember:** A client assigned as the gateway in a gateway network cannot be a member of any other network.

- Click **Save**.  
If the client is online, changes are applied immediately. If offline, changes are applied when the client comes online.

## How to Change Network Password Settings

- On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
- On the **My Networks** page, click **Edit** next to the network you want to work with. The **Edit Network** page is displayed.
- Select the **Password** tab.
- Activate or de-activate the password requirement.



**Tip:** If you do not set a password, we recommend setting the Join Request behavior to **Must be approved** or **Members can be added on the web only**.

5. To change the password, type a new password and re-enter to confirm.
6. Click **Save**.

## How to Delete a Network

1. On the LogMeIn web site, go to the **Networks > My Networks** page. Your Hamachi networks and clients are listed.
2. On the **My Networks** page, click **Edit** next to the network you want to work with. The **Edit Network** page is displayed.
3. Select the **Delete** tab.
4. Click the **Delete** button. The network is permanently deleted. All client installations and client-to-account relationships are left intact.

## How to Leave a Network

This procedure must be executed on the client.

1. On the client, right-click on the network that you want to leave.
2. Click **Leave network**.




**Important:** You cannot transfer the ownership of a network; therefore, you cannot leave a network that you created. You can only delete such networks.



**Note:** A network owner can prohibit members from leaving a network. To check if members are allowed to leave a network without the owner's permission, see [How to Edit Network Settings](#) on page 46.

## How to Resolve Network Member Limit Issues

A blue warning icon  next to the name of a network signals that there is an issue with the number of network members. In this case, you are either approaching the member limit of your network, or you have already exceeded it.

This procedure must be executed on the client.

1. On the client, click the blue warning icon and check the description of the issue. Alternatively, next to the name of your network, click the number displaying the network member limit.
2. Click **Upgrade options** to purchase a subscription that allows you to add more members to your network. The LogMeIn Hamachi website opens.
3. Follow the instructions to purchase a subscription. For information, see [How to Purchase Subscriptions from the Hamachi Client](#) on page 10.



---

## How to Transfer a Hamachi Network to Your LogMeIn Account



**Important:** You can only transfer a network from the Hamachi client to your LogMeIn account if the network was created on the Hamachi client.

This procedure must be executed on the client.

1. On the client, right-click on the network that you want to transfer to your LogMeIn account.
2. Click **Transfer ownership to <your LogMeIn account>**.  
The name of the LogMeIn account holder to whom the client is attached is displayed.
3. Click **OK** to transfer the network to the LogMeIn account.

You will see the network listed among your networks in your LogMeIn account.



**Tip:** Hover your mouse over the network name to see the current owner of that network.



**Tip:** On Linux, networks created on the client can be transferred at the time of the attach request via the `sudo hamachi attach-net` command.

## How to Change the Priority of the Virtual Network Adapter

Hamachi puts its virtual network adapter at the bottom priority in Windows. This is done to ensure there are no conflicts when Hamachi runs on an Active Directory Domain Controller or DNS server.



**Important:** If you are on a wireless network, you may run into unpredictable connection issues when making this change.

1. Go to the Advanced Settings of your computer:
  - a) On Windows XP, go to **Control Panel > Network Connections > Advanced > Advanced Settings**
  - b) On Windows 7, 8, or Vista, go to **Start**, type `ncpa.cpl` in the search field, and press **Enter**. Then press **Alt** to show the menu bar, and click **Advanced > Advanced Settings**.
2. Use the Up/Down buttons to reorder the network adapters to your preference.  
Hamachi will perform best at the top, but the difference is very minor in all but very intense usage, and may cause compatibility issues with other Network-centric tasks.

---

# LogMeIn Hamachi Troubleshooting

Advanced users can follow the guidelines in this section to help resolve common Hamachi issues. If these guidelines do not solve your issue, contact LogMeIn.



**Tip:** See the [Knowledge Base](#) for further troubleshooting assistance. For information about how to collect troubleshooting data, see [How to Collect Information for Troubleshooting](#) on page 36.

## Using Hamachi Self-Diagnosis to Detect Problems

The built-in *Hamachi Self-Diagnosis* feature helps resolve connectivity, installation and system driver problems with your Hamachi client or a specific peer.



**Note:** When the Hamachi service is not running and you attempt to launch the Hamachi client, *Hamachi Self-Diagnosis* is started automatically.

### Troubleshooting your Hamachi client

1. Launch the Hamachi client.
2. Go to **Help > Diagnostic Tool**.  
The **Hamachi Self-Diagnosis** window is displayed.
3. Click **Start** and wait for the tests to finish.  
Test results are displayed.

Problems detected? [Go to the next step](#).

### Troubleshooting a specific peer

1. Launch the Hamachi client.
2. Right-click the peer you want to diagnose, and select **Diagnose**.



**Note:** The test is run automatically.

3. Wait for the tests to finish.  
Test results are displayed.

Problems detected? [Go to the next step](#).

### What can I do when problems are detected?



**Note:** The *Hamachi Self-Diagnosis* is not intended to resolve issues automatically.

Once all tests are run, follow the steps below from the results window.

1. Click **Details** to see further information on a detected issue.

- 
2. To take action, see our troubleshooting pages for fixes to common problems. If the issue persists, go to step 3.
  3. Click **Summary** to see an aggregated report on all test results.
  4. Click **Save as...** to save the summary report. Send the report to LogMeIn product support.

## Troubleshooting Failed Hamachi Client Setup

### Symptoms

You see the following error when you start the Hamachi client:

```
Setup has failed
```

### Cause

There are two main causes of receiving this error message:

- There is a corrupt profile from Hamachi v1.x.
- Third party software is managing some aspect of the network stack. The two most notable are nVidia (via their NIC Drivers) and Norton.

### Action/Workaround

- Completely remove any and all files and folders regarding Hamachi, and clean the registry of Hamachi entries. Subsequently, reboot the computer and reinstall the Hamachi client.
- Configure either third-party software accordingly.

## Troubleshooting Hamachi Rejected Login Request

### Symptoms

You see the following error:

```
The Hamachi server has denied your login request.
```

### Cause

The IP address of your Hamachi client was recycled.

### Action/Workaround

Uninstall and reinstall the Hamachi client.

---

## Troubleshooting a Windows Hamachi Client Failing to Connect to the Hamachi Engine

### Symptoms

You see the following error

```
Failed to connect to engine.
```

### Cause

This indicates the failure of the Hamachi service.

### Action/Workaround

1. Press the **Windows key** and the **R** key on your keyboard to open the **Run** window.
2. Type `services.msc`, and press **Enter**.
3. Right-click on **LogMeIn Hamachi Tunneling Engine** and select **Restart**.  
The status of the service changes to **Started**.

If the **LogMeIn Hamachi Tunneling Engine** service does not start, you must edit the Windows registry.



**Caution:** Editing the Windows registry incorrectly may stop other applications from working correctly.

1. Press the **Windows key** and the **R** key on your keyboard to open the **Run** window.
2. Type `regedit`, and press **Enter** to open the Registry Editor.
3. Select the **HKEY\_LOCAL\_MACHINE\SOFTWARE\LogMeIn Hamachi** entry.
4. Right-click on an empty line and select **New > String Value**.
5. Name the new key as **EngineConfigDir**.
6. Double-click on the **EngineConfigDir** key and in the **Value** field, enter a location on your computer to store the necessary configuration files. Hamachi creates the configuration files automatically.
7. Restart the **LogMeIn Hamachi Tunneling Engine** as described above.



**Important:** If your anti-virus software reports or blocks `Hamachi-2-ui.exe`, you must add an exclusion for the `Hamachi-2-ui.exe` program. Please consult your anti-virus software documentation for assistance with adding an exclusion to the allowed list.

## Windows Hamachi Client Fails to Connect to the Hamachi Network Adapter

### Symptom

When you launch the Hamachi application, you see a yellow triangle with a "Tunnel problem" error that takes you to an error message that says the following:

```
network adapter error: Failed to connect to the network adapter. Peer is not accessible via VPN
```

---

## Cause

hamachi-2.exe was unable to access the Hamachi network adapter.

## Resolution One

Make sure the network adapter is enabled in Network Connections, as follows:

1. Press the Windows key + R.  
The **Run** box is displayed.
2. Type **Control Panel** and press Enter.  
The **Control Panel** window is displayed.
3. Select either **Network and Sharing Center** or **Network and Internet > Network and Sharing Center**.
4. On the left side of the window, click **Change Adapter Settings**.  
Network Connection options are displayed.
5. Right-click on the **Hamachi** adapter and select **Enable**.  
A dialog box saying **Enabling...** is displayed.

## Resolution Two

Manually uninstall and reinstall the Network Adapter.

1. Open the Device Manager, as follows:
  - a) Press the Windows key + R. The **Run** box is displayed.
  - b) Type `devmgmt.msc` and press Enter.  
The Device Manager window is displayed.
2. Select and delete the LogMeIn Hamachi Virtual Ethernet Adapter, as follows:
  - a) Click the arrow next to **Network adapters**.
  - b) Right-click on **LogMeIn Hamachi Virtual Ethernet Adapter**.
  - c) Click **Uninstall > OK**.  
The old **LogMeIn Hamachi Virtual Ethernet Adapter** should now be uninstalled.
3. Restart the computer.
4. Using the Hardware Wizard, install the LogMeIn Hamachi Virtual Ethernet Adapter, as follows:
  - a) Press the Windows key + R. The **Run** box is displayed.
  - b) Type `hdwwiz` and press **Enter**. The Add Hardware Wizard is displayed.
  - c) Click **Next**.
  - d) Select **Install the hardware that I manually select from a list** and click **Next**.
  - e) Under **Common hardware types** select **Network adapters** and click **Next**.
  - f) Select **Have Disk...**. The **Install From Disk** menu is displayed.
  - g) Select **Browse...**. The **Locate File** menu is displayed.
  - h) Navigate to the Hamachi installation folder at `C:\Program Files (x86)\LogMeIn Hamachi`.
  - i) For Windows Vista, 7, 2008 and 2008R2, select **hamachi.inf**; for Windows 8 and above, select **hamdrv.inf**.
  - j) Click **OK > Next**.
  - k) Click **Finish**.  
The **LogMeIn Hamachi Virtual Ethernet Adapter** should now be installed.
5. Rename the adapter, as follows:

- 
- a) Open **Network Connections** by pressing Windows key + R and typing **Control Panel** in the **Run** box.
  - b) In the Control Panel window, select either **Network and Sharing Center** or **Network and Internet > Network and Sharing Center**.
  - c) On the left side of the window, click **Change Adapter Settings**.
  - d) Right-click on the adapter with the description **LogMeIn Hamachi Virtual Ethernet Adapter** and select **Rename**.
  - e) Rename the adapter Hamachi.
6. Restart the computer.  
The Network Adapter should now be installed and operational.

### Resolution Three

Enable the **DHCP Client** and **Network Connections** services in **services.msc**.

1. Press the Windows key + R.  
The **Run** box is displayed.
2. Type `services.msc` and press **Enter**.  
The **Services** window is displayed.
3. Locate and right-click the **DHCP Client** service and select **Start**.  
The **DHCP Client** service is started.
4. Locate and right-click the **Network Connections** service and select **Start**.  
The **Network Connections** service is started.
5. Locate and right-click the **LogMeIn Hamachi Tunnelling Engine** service and select **Restart**.  
The Hamachi software should restart.

### Other Resolutions

- Disable the firewall on the machine experiencing the error.
- Run WinSock to revert certain Windows networking registry values to their defaults. For details, read this [Microsoft support article](#).

## Troubleshooting Windows Network Connections

### Symptoms

After reinstalling Hamachi manually, your network connections list is still empty and the Hamachi client fails to connect to the network adapter.

### Cause

Your registry may be corrupted.

### Action/Workaround



**Important:** Make a backup of your registry before you proceed.

1. Press the **Windows key** and the **R** key on your keyboard to open the **Run** window.
2. Type `regedit`, and press **Enter**.
3. Navigate to `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Network` and delete the `Config` key.

- 
4. Reinstall Hamachi.
  5. Go to **Control Panel > Device Manager** and remove your network adapter.
  6. In the Device Manager, select **Action > Scan for hardware changes** to reinstall the network adapter.

## Troubleshooting a Hamachi Client Failing to Go Online

### Symptoms

When attempting to ping a client you see the following error:

General failure.

### Cause

This indicates a failure at the Hamachi adapter level.

### Action/Workaround

First, ensure that you can ping your actual IP Address. If you can, then the problem lies in the virtual adapter. Restart the Hamachi client. If this fails, uninstall and reinstall the client.

## Troubleshooting Pinging Hamachi Hosts

### Symptoms

You see the following error:

Destination Host Unreachable.

### Cause

The host you are trying to ping is not present in the network.

### Action/Workaround

Generally this indicates that the Hamachi client is turned off, or is otherwise unable to establish a connection to the other peers in the network. The most common software that will block hamachi is the [Windows Firewall](#) .



**Tip:** If your destination Hamachi client has a third party firewall or anti-virus, you may need to allow the Hamachi adapter through their firewall. Contact your anti-virus software vendor for assistance.

---

## Troubleshooting a Hamachi Client in Probing Status

### Symptoms

The client cannot go online and remains in **probing** status.

### Cause

If a Hamachi client cannot go online, there is generally a problem with the firewall configuration, which is set to too restrictive.

### Action/Workaround

Ensure that the `Hamachi-2.exe` file is allowed through all firewalls.

## Troubleshooting Hamachi Client Request Time Out

### Symptoms

You see the following error:

```
Request timed out
```

### Cause

This is the error you receive when Hamachi is blocked by a firewall.

### Action/Workaround

Ensure that Internet Control Message Protocol (ICMP) requests are allowed, preferably only for the Hamachi Adapter, within the firewall you use.

## Troubleshooting Communication between Hamachi Clients

### Symptoms

You see a yellow triangle with an exclamation mark (a warning icon) next to the name of the peer you want to communicate with and no traffic is going through between the peers.

### Cause

You generally see a warning next to a peer if the security settings block traffic between peers.

### Action/Workaround

Click on the warning icon and then click on the description of the problem. This opens the **Peer Properties** window. The errors are marked in red.



- 
- If there is a connection error, on the **Settings** tab, click the **change** link next to **Traffic**. Then change the setting to **Block unsecured** or **Allow all**.



**Important:** We do not recommend that you select **Allow all**.

- If there is an authentication error, the peer is untrusted by your client. Click on the **details** link next to the error and then click on the description of the error. Then click **Trust** to authenticate the peer.

## Troubleshooting Hamachi v1.x Network Restoration on Windows Clients

### Symptoms

You do not see your Hamachi v1.x networks after reinstalling Windows and installing the Hamachi v2.x client.

### Cause

Hamachi v1.x and Hamachi v2.x use different configuration files, therefore a Hamachi v2.x client does not recognize Hamachi v1.x networks by default.

### Action/Workaround

1. Save your Hamachi v1.x configuration file that you can find in the `C:\Documents and Settings\user\Application Data\Hamachi` folder by default.
2. Uninstall the Hamachi client and remove all user settings.
3. Download the Hamachi v1.x client from the Internet and install it.
4. Restore your Hamachi v1.x configuration by overwriting it with your old configuration file.
5. Run Hamachi v1.x.
6. From the **System** menu, select **Update Hamachi** to update your client to Hamachi v2.x.

---

# LogMeIn Hamachi Glossary

## Gateway network

Use the gateway network type to provide transparent access to your entire network from a centralized Hamachi gateway. Members of a gateway network, such as mobile workers, will see one computer acting as a gateway towards an entire LAN, thus making all network resources accessible.



**Note:** Gateway networks are not supported on Azure.

## Hamachi client

The term Hamachi client refers to both the Hamachi software itself and any computer or smartphone with Hamachi client software installed. With proper permission from network owners, Hamachi clients can become members of any Hamachi network.

## Hamachi network

For Hamachi, a network is not a physical network, but rather a group of users who want to use common resources or applications (two or more Hamachi clients interconnected by tunnels make up a Hamachi network). Hamachi offers three network types: meshed, hub-and-spoke, and gateway.

## Hub-and-spoke network

In a hub-and-spoke network, one or more computers act as hubs, while other clients connect as spokes. Spokes connect to hubs, but never to each other.

## LogMeIn Central

LogMeIn Central is LogMeIn's Essential Remote Services solution for IT professionals and small and medium businesses. Certain premium Hamachi features are only available to LogMeIn Central subscribers.

## Mesh network

In a mesh network, every member is connected to every other member.

---

## **NAT**

Network Address Translation

## **Peer**

A computer that is a member of a computer network.

## **Peer Label**

The Peer Label is used to define your online presence to other Hamachi users. This is what other users see as your identification when you are in a Hamachi network.

## **Unattached network**

The term Unattached network refers to any Hamachi network that was created on an unattached client. Unattached networks can only be mesh networks and they cannot be managed on the web using the My Networks page or LogMeIn Central.

## **VPN**

Virtual Private Network

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# Index

## A

- account
  - LogMeIn 12
- attached client 6
- attaching clients 18

## B

- basic settings 30

## C

- change password 47
- chat 25
  - colors 35
  - settings 34
- client
  - add 19
  - attach 18
  - automatic update 35
  - change role 47
  - change status 26
  - deployment 14
  - detach 23
  - interface 22
  - preferences 29
  - remove 19
  - rename 19, 35

## D

- default settings 17
- disable UPnP 37
- domain name servicing 20

## F

- firewall 11

## G

- gateway network 44

## H

- Hamachi client 6
- Hamachi features 11
- Hamachi installation for Windows 15
- Hamachi license 9, 11
- Hamachi network types 7
- Hamachi subscription 9, 11

- Hamachi update 15
- Hamachi virtual IP address 7

## I

- installation directories 36
- instant message 26
- interface settings 30, 31
- IP range 44

## J

- join requests 46

## L

- license 9, 11
- Linux 12, 40
- log 36

## M

- multiple subnets 43

## N

- network
  - add 42
  - add from client 45
  - default settings 42
  - delete 48
  - edit settings 46
  - LAN settings 44
  - leave 48
  - rename 45
  - transfer 49
- network connection 29
- network types
  - gateway 8
  - hub-and-spoke 7
  - mesh 7

## O

- online presence 34

## P

- password protection 28
- peer connection settings 32
- preferences 29

## R

RSA key protection 28

## S

securing connections 27

security 11

server connection settings 32

settings

- basic 30

- custom variables 31

- interface 30

subscription 9, 11

system requirements 12

## T

tags 24, 27

- assign 24

- create 24

tags (*continued*)

- manage 24

transfer network 49

troubleshooting 36, 37, 50

- client failing to go online 55

- client in probing status 56

- client request time out 56

- communication between clients 56

- failed client setup 51

- pinging Hamachi hosts 55

- rejected login requests 51, 57

## U

unattached client 6

unattached network 38

- delete 39

- evict member 40

- set access 38

unverified peers 28

UPnP 37