LogMeIn Hamachi User Guide
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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 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
About the Relationship Between the Client and Your LogMeIn Account

The Hamachi client can be used in Client-only (unattached) mode as a stand-alone service with no relation to a LogMeIn account, or in web management mode as an attached member of a LogMeIn account.

Client-only mode: Unattached

The term Unattached client refers to any Hamachi client that has not been added to a LogMeIn account and is being used in Client-only mode. Unattached clients cannot be managed on the web using the My Networks page or LogMeIn Central. It can still join existing networks and create mesh networks.

Web management mode: Attached

The term Attached client refers to any Hamachi client that has been added to a LogMeIn account. Any LogMeIn account holder can manage attached clients on the web using the My Networks page, while LogMeIn Central subscribers can use LogMeIn Central.

About the Hamachi Virtual IP Address

Every Hamachi client has one virtual IP address in the 5.x.x.x range. 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.

The virtual IP address does not conflict with any other IP ranges and therefore has no impact on standard network communications.
LogMeIn Hamachi Network Types

LogMeIn Hamachi provides three network types for flexibility in meeting diverse use case scenarios. They differ mainly in network topology.

Hamachi clients can be members of any network; however, there is a limit of 16 members per network for a non-commercial license, or 256 per network owned by a commercial license holder or LogMeIn Central subscriber.

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.
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. 5.x.x.x addresses are not available for a gateway network. Instead, the local address space is used.
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
• Manage the default settings to be applied to a new client
• 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
• Manage requests to join Hamachi networks

Commercial versus Non-Commercial Use
Hamachi is free for non-commercial use and allows up to 16 computers per network.

The commercial version offers fast relays, allows up to 256 computers per network, and is subject to an annual subscription fee.

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.
Installing LogMeIn Hamachi

System Requirements

Hamachi client

- Mac Operating System: Mac OS 10.4 (Tiger), 10.5 (Leopard), 10.6 (Snow Leopard), or 10.7 (Lion) on Intel-based Macs
- Internet connection
- There are no special hardware requirements

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.

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.

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.

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.

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.

---

**How to Update the Hamachi Client**

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

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

This procedure must be executed on the client.

- 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**.
Making the Transition to Hamachi v2.x on a Windows Client

Making the transition from Hamachi v1.x to Hamachi v2.x is a simple process.

This assumes that you were a Hamachi v1.x user without a LogMeIn account.

1. Create a LogMeIn account.
   b) Click Create an account in the upper-right corner.
   c) Select Access Computers Remotely.
      The registration form is displayed.
   d) Fill in the registration form and follow all on-screen instructions.
      Upon completing the account form you will be sent a confirmation email.
   e) 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.

2. While logged in to your account, install Hamachi on the computer running Hamachi v1.x. See How to Install the Client to a Local Computer on page 10.

3. When prompted to attach the client to your LogMeIn Account, be sure to select Attach networks and click Attach.

You will now be able to manage your Hamachi clients and networks on the web.
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, switch to Network mode and select the Configuration link on the left menu.
2. Under Configuration, select the Client Defaults tab.
3. Select an Interface Mode.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>The client will offer full functionality to end users.</td>
</tr>
<tr>
<td>Restricted</td>
<td>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.</td>
</tr>
<tr>
<td>Minimal</td>
<td>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.</td>
</tr>
</tbody>
</table>

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

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

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.
This procedure must be executed on the client.

1. On a Windows client, under the System menu, select Attach to LogMeIn account. On a Mac client, under the LogMeIn Hamachi 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 will show 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.

Once approved, the client can be managed using the LogMeIn website. 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.

---

**How to Rename a Client**

1. On the LogMeIn web site, switch to Network mode and click All Clients.
   The All Clients page is displayed.
2. On the All Clients 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.

To rename the client from the client itself, see How to Rename a Client from the Client on page 26.

---

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

1. On the LogMeIn web site, switch to Network mode and click All Clients.
   The All Clients page is displayed.
2. On the All Clients 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 Change the Client Interface

1. On the LogMeIn web site, switch to Network mode and click **All Clients**.
   The **All Clients** page is displayed.

2. On the **All Clients** 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**.

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</tr>
<tr>
<td>Can join networks</td>
<td>Allow the client to be used to join networks other than those assigned on the web.</td>
</tr>
<tr>
<td>Can chat</td>
<td>Allow the client to be used for chat between Hamachi peers.</td>
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</tr>
<tr>
<td>Maintain log</td>
<td>Allow the client to store a Hamachi event log.</td>
</tr>
</tbody>
</table>
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, switch to Network mode and click **All Clients**.  
   The **All Clients** page is displayed.
2. On the **All Clients** 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.

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**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, switch to Network mode and select the **Configuration** link on the left menu.
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 All Clients > 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, switch to Network mode and click All Clients. The All Clients page is displayed.
2. On the All Clients 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.
Using the LogMeIn Hamachi Client

The term Hamachi client refers to both the Hamachi software itself and any computer 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.

1. Select Network > Join an existing network.
2. Type the network ID and password of the network.
3. Click Join. Depending on the settings of the individual Hamachi networks, the owner of the network may have to approve your request before you can 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.

How to Chat in a Network

This procedure must be executed on the client.

1. On the client, right-click on the network member that you want to chat with. You can also right-click on the name of the network to initiate a group chat with all members of the network.
2. Click Chat for peer to peer chat or Open chat window for group chat. 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. The other parties of the chat session either receive a notification on their system tray, next to the clock, or the Chat window opens automatically depending on the chat settings. See How to Change the Chat Settings on page 25.

What else can I do during chat?

During a chat session, right-click on the chat window to access the following options:

<table>
<thead>
<tr>
<th>Menu item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper pane</td>
<td></td>
</tr>
<tr>
<td>Copy</td>
<td>Copies a selected text from the Chat window to the clipboard.</td>
</tr>
</tbody>
</table>
### Menu item | Description
--- | ---
Clear chat history | Clears the upper pane of the Chat window.
Load chat history | Loads a previous chat session with the selected member of group. To enable chat history, see How to Change the Advanced Interface Settings on page 23.

### Lower pane

| Item | Description |
--- | ---
Paste | Inserts text from the clipboard to the lower pane of the Chat window.
Paste and send (Windows only) | Inserts text from the clipboard and sends that text to the other parties of the chat session.
Clear (Windows only) | Clears the lower pane of the Chat window.
Cut (Mac only) | Copies text to the clipboard and removes it from the Chat.
Copy (Mac only) | Copies a selected text from the Chat window to the clipboard.

### 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.

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

- **Note:** To display the status of the client, see How to Change the Advanced Interface Settings on page 23.

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

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>grey</td>
<td>The peer is offline.</td>
</tr>
<tr>
<td>blinking green</td>
<td>The client is trying to establish connection to the peer.</td>
</tr>
<tr>
<td>solid green</td>
<td>There is a direct link between the client and the peer.</td>
</tr>
<tr>
<td>blue</td>
<td>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>.</td>
</tr>
<tr>
<td>red</td>
<td>Traffic is blocked between the client and the peer. Right-click on the peer to find out why communication is blocked.</td>
</tr>
</tbody>
</table>

**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 35.

**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.

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. On Windows, click System > Preferences. On a Mac, click LogMeIn Hamachi > Preferences.
2. On the Setting 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 the Peer Connection Settings on page 24.

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

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.
1. On Windows, click System > Preferences. On a Mac, click LogMeIn Hamachi > Preferences.

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 20.

   • The Settings tab manages the appearance and functionality of the client.

3. Click OK or Apply to save your settings.

How to Change the 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.

This procedure must be executed on the client.

1. On Windows, click System > Preferences. On a Mac, click LogMeIn Hamachi > Preferences.

2. On the Settings tab, click the Basic settings link at the bottom of the page. If this link is not available, then you are already viewing the basic settings. Select the following options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show splash screen on startup (Windows only)</td>
<td>Choose this option to display the Hamachi logo when Hamachi is started.</td>
</tr>
<tr>
<td>Hide offline network members</td>
<td>An offline network member is listed on the client with its name grayed out. Choose this option to hide offline peers.</td>
</tr>
<tr>
<td>Enable online presence (Mac only)</td>
<td>Choose this option to display and be able to modify the online presence of your client. You can change your presence in the Status menu on the Hamachi client.</td>
</tr>
<tr>
<td>Enable chat</td>
<td>Choose this option to enable peer and group chat.</td>
</tr>
<tr>
<td>Encryption</td>
<td>Choose this option to provide extra protection against sniffing. For business use, we highly suggest using encryption. Use of this option may cause minimal extra CPU load for both sender and receiver. This option is only available for clients running in full mode.</td>
</tr>
<tr>
<td>Compression</td>
<td>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.</td>
</tr>
<tr>
<td>Enable automatic update</td>
<td>Choose this option to automatically download the latest version of the Hamachi client. This option is only available for clients running in full mode.</td>
</tr>
<tr>
<td>Disable UPnP</td>
<td>Choose this option to disable automatic port detection for establishing peer-to-peer connection with other Hamachi clients. When this option is enabled, Hamachi tries to use a relay tunnel with other peers if it cannot establish peer-to-peer connection.</td>
</tr>
</tbody>
</table>
3. Click OK or Apply to save your settings.

How to Change the Advanced Interface Settings

This procedure must be executed on the client.

1. On Windows, click System > Preferences. On a Mac, click LogMeIn Hamachi > Preferences.
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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show splash window when started</td>
<td>Choose this option to display the Hamachi logo when Hamachi is started.</td>
</tr>
<tr>
<td>(Windows only)</td>
<td></td>
</tr>
<tr>
<td>Show main window in the taskbar</td>
<td>Choose this option to display the main Hamachi window on the taskbar.</td>
</tr>
<tr>
<td>(Windows only)</td>
<td></td>
</tr>
<tr>
<td>Show peer windows in the taskbar</td>
<td>Choose this option to display the Peer Properties window on the taskbar once you right-click on a peer and click Details.</td>
</tr>
<tr>
<td>(Windows only)</td>
<td></td>
</tr>
<tr>
<td>Show chat windows in the taskbar</td>
<td>Choose this option to display the chat windows on the taskbar.</td>
</tr>
<tr>
<td>(Windows only)</td>
<td></td>
</tr>
<tr>
<td>Confirm evicting a network member</td>
<td>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.</td>
</tr>
<tr>
<td>Hide offline network members</td>
<td>Choose this option to hide network members if they go offline.</td>
</tr>
<tr>
<td>Peer label format</td>
<td>Select the format of peers’ names as they appear on the client. If you select custom, you must define it in the Custom format field. This option is only available for clients running in full mode.</td>
</tr>
<tr>
<td>Peer double-click action</td>
<td>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.</td>
</tr>
<tr>
<td>Show Quick IM in peer’s menu</td>
<td>Choose this option to display the Send Quick IM option if you right-click on a peer.</td>
</tr>
<tr>
<td>(Windows only)</td>
<td></td>
</tr>
<tr>
<td>Show custom command in peer’s menu</td>
<td>Choose this option to add a custom command to a peer’s menu. The command is displayed as defined in the Label field and issues the command that the Command field contains. For example, you can define remote desktop as a custom command by entering mstsc /v:$VIP in the Command field and name it in the Label 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.</td>
</tr>
</tbody>
</table>

3. Click OK or Apply to save your settings.

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. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.

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.

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

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

**How to Change the 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. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.

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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Authentication</strong></td>
<td>Select the authentication method of peers.</td>
</tr>
<tr>
<td><strong>IP protocol mode</strong></td>
<td>Select the type of Internet protocol that you want to use to communicate with other peers. You have the following options:</td>
</tr>
<tr>
<td></td>
<td>• IPv6 only</td>
</tr>
<tr>
<td></td>
<td>• IPv4 only</td>
</tr>
<tr>
<td></td>
<td>• Both (default)</td>
</tr>
<tr>
<td></td>
<td>The following limitations are applied when using <strong>IPv6 only</strong> mode:</td>
</tr>
<tr>
<td></td>
<td>• Windows XP does not support IPv6 by default. If you select the <strong>IPv6 only</strong> or <strong>Both</strong> option, you will be asked to install and enable the IPv6 functionality in Windows.</td>
</tr>
<tr>
<td></td>
<td>• 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 <strong>IPv6 only</strong> mode then client B must use either <strong>Both</strong> or <strong>IPv6 only</strong> protocol mode to communicate.</td>
</tr>
<tr>
<td></td>
<td>• Windows 2000 does not support IPv6 mode.</td>
</tr>
<tr>
<td><strong>Encryption</strong></td>
<td>Choose this option to provide extra protection against sniffing. For business use, we highly suggest using encryption. Use of this option may cause minimal extra CPU load.</td>
</tr>
</tbody>
</table>
### Description Option

for both sender and receiver. This option is only available for clients running in full mode.

### Compression

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.

### Traffic filtering

Choose this option to block incoming traffic from peers. You can block untrusted, not secured, all, and no traffic.

### Local UDP address

Define an optional UDP address that you want to use for connection to other peers.

### Local TCP address

Define an optional TCP address that you want to use for connection to other peers.

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.

1. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.
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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable</td>
<td>Choose this option to display and be able to modify the online presence of your client. You can change your presence in the <strong>Status</strong> menu on the Hamachi client.</td>
</tr>
<tr>
<td>Show peer status in the main list</td>
<td>Choose this option to display the online presence of other network members.</td>
</tr>
<tr>
<td>Switch to Away mode (Windows only)</td>
<td>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 <strong>after being idle for</strong> field.</td>
</tr>
</tbody>
</table>

3. Click OK or Apply to save your settings.

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

### How to Change the Chat Settings

This procedure must be executed on the client.

1. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.
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.

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

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.

1. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.
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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panes and messages</td>
<td>Define a color for each pane and message type.</td>
</tr>
</tbody>
</table>

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. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.
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.

**How to Update the Client Automatically**

This procedure must be executed on the client.

1. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.
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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable automatic update</td>
<td>Choose this option to automatically download the latest version of the Hamachi client.</td>
</tr>
</tbody>
</table>

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

1. On Windows, click System > Preferences. On a Mac, click LogMeIn Hamachi > Preferences.
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.

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

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.

1. On Windows, click System > Preferences. On a Mac, click LogMeIn Hamachi > Preferences.
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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable diagnostic log</td>
<td>Choose this option to log the activity of the Hamachi client. You can only turn off logging on clients running in full mode.</td>
</tr>
<tr>
<td>Log file</td>
<td>Define the path of the log file.</td>
</tr>
</tbody>
</table>

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.

1. On Windows, click System > Preferences. On a Mac, click LogMeIn Hamachi > Preferences.
2. Click the Settings tab. You can find this option in the Troubleshooting section.
Enable UPnP

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable UPnP</td>
<td>Choose this option to disable automatic port detection for establishing peer-to-peer connection with other Hamachi clients. When this option is enabled, Hamachi tries to use a relay tunnel with other peers if it cannot establish peer-to-peer connection.</td>
</tr>
</tbody>
</table>

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.

This procedure must be executed on the client.

**How to Backup Configuration Files**

1. On Windows, click **System > Preferences**. On a Mac, click **LogMeIn Hamachi > Preferences**.
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 as described in **How to Backup Configuration Files** on page 28.
2. Open the **Run** window:
   - On Windows XP, go to **Start > Run**
   - On Windows 7 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 2.0 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 2.0 Tunneling Engine** and select **Start**.
7. When the client goes online, it will retain its original identity.

**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.
This procedure must be executed on the client.

1. On the client, right-click the network you want to work with.
2. Click **Set Access**.
   The **Network Access** window appears.
3. Set the necessary access rights as follows:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not accept new network members</td>
<td>Select this option if you do not want to extend your network with new members.</td>
</tr>
<tr>
<td>Require a password to join the network</td>
<td>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 <strong>Set Password</strong> and follow the on-screen instructions.</td>
</tr>
<tr>
<td>Approve all new members manually</td>
<td>The user must approve the membership of all new members.</td>
</tr>
</tbody>
</table>

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

**How to Delete an Unattached Network**

This procedure must be executed on the client.

1. On the client, right-click on the network that you want to delete.
2. Click **Delete network**.
3. 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.]

**How to Evict a Member of an Unattached Network**

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.
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, switch to Network mode and select the Configuration link on the left menu.
2. Under Configuration, select the Network Defaults tab.
3. Select a Network type.
4. Select the default response to join requests.

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

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, switch to Network mode and click My Networks. The My Networks page is displayed.
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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept automatically</td>
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<td>Members can be added on the web only</td>
<td>Clients will not be able to join the network from the client. Clients can be added to the network on the web only.</td>
</tr>
</tbody>
</table>

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, switch to Network mode and click **My Networks**. The My Networks page is displayed.
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:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disable members going online in the host network</strong></td>
<td>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. <strong>Tip:</strong> Ensure that ICMP traffic on the gateway is not blocked by a firewall.</td>
</tr>
<tr>
<td><strong>Disable network stack components</strong></td>
<td>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. <strong>Tip:</strong> Ensure that ICMP traffic on the gateway is not blocked by a firewall.</td>
</tr>
<tr>
<td><strong>Do not restrict members</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>
5. Click Save.

How to Add a Hamachi Network from the Client

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.

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, switch to Network mode and click My Networks. The My Networks page is displayed.
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.

1. On the web interface, 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.
2. Click the pending join request link. The Join Requests page is displayed.
3. Choose Accept or Reject, as appropriate.
4. Click Save.
How to Edit Network Settings

1. On the LogMeIn web site, switch to Network mode and click My Networks. The My Networks page is displayed.
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.

<table>
<thead>
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</tr>
</tbody>
</table>

7. 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.
8. Click Save.

How to Modify the Client’s Role in a Network

1. On the LogMeIn web site, switch to Network mode and click My Networks. The My Networks page is displayed.
2. On the My Networks page, click Edit next to the network you want to work with. The Edit Network page is displayed.
3. Click Add/Remove Members.
4. 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.
5. 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

1. On the LogMeIn web site, switch to Network mode and click My Networks.
   The My Networks page is displayed.
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 Password tab.
4. 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, switch to Network mode and click My Networks.
   The My Networks page is displayed.
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 34.
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 2000/XP, go to Control Panel > Network Connections > Advanced > Advanced Settings
   b) On Windows 7/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.

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 2.0 Tunneling Engine** and select **Restart**.
   The status of the service changes to **Started**.

   If the **LogMeIn Hamachi 2.0 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 2.0 Tunneling Engine** as described above.

Troubleshooting a Windows Hamachi Client Failing to Connect to the Hamachi Network Adapter

**Symptoms**
You see the following error
Failed to connect to the adapter.

**Cause**
This indicates the failure of the Hamachi network adapter.

**Action/Workaround**
You can try the following methods to repair the connection to the Hamachi network adapter.
- Disable your software firewall (unless it is the Windows Firewall) reboot, and try again.
- Open Device Manager and manually enable the driver for 'Hamachi Network Interface’. Then start Hamachi and see if it can connect. If it can, then something is not working properly in Device Management on your system, which might be caused by a driver (not necessarily a networking one). Troubleshooting this would be done by
booting in safe mode, manually starting the virtual adapter, and then running Hamachi. You can then start turning
devices on, one by one, until the conflict is found.

• Check your Network Connections folder and see if Hamachi's adapter is called Hamachi, and not something like
"Local Area Connection 4". If it is not named Hamachi, then rename it to Hamachi and try running the application
again. Make sure that Network Connection Hamachi is activated.

• Type services.msc, and press Enter. Then ensure the "DHCP Client" and "Network Connections" services are
running.

• You can run WinSock to revert certain Windows networking registry values to their defaults, thus resetting the
Windows network stack to default operation. You can download WinSock at

• If none of the above helps, then there is something on your system that is overriding default access control for
system drivers, in which case you need to isolate and disable this component.

In some cases, Windows fails to properly install the network adapter and there is no Hamachi adapter listed in the
Network connections folder. In this case, you may have to manually reinstall the network adapter as follows:

1. Go to Start > Run, and type hdwwiz.cpl. If you receive an error, try again with hdwwiz only.
   a) If it begins searching immediately, let it finish, then choose Yes, I have already connected the hardware.
   b) If it displays the currently installed devices, scroll down to the bottom.

2. Choose Add a new hardware device. If it is not there, go to the next step.

3. Choose Install the hardware that I manually select from a list (Advanced).

4. Select Network adapters.

5. Click Have Disk and then Browse.

6. Browse to the installation folder, and select the Hamachi.inf file.

7. Finish the installation of the adapter.

8. Check your Network Connections folder and see if Hamachi's adapter is called Hamachi, and not something
like "Local Area Connection 4". If it is not named Hamachi, then rename it to Hamachi and try running the
application again. Make sure that Network Connection Hamachi is activated.

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.

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**

**Attached client**

The term Attached client refers to any Hamachi client that has been added to a LogMeIn account. Any LogMeIn account holder can manage attached clients on the web using the My Networks page, while LogMeIn Central subscribers can use LogMeIn Central.

**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.

**Hamachi client**

The term Hamachi client refers to both the Hamachi software itself and any computer 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 client**
The term Unattached client refers to any Hamachi client that has not been added to a LogMeIn account and is being used in Client-only mode. Unattached clients cannot be managed on the web using the My Networks page or LogMeIn Central. It can still join existing networks and create mesh networks.

**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.

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Virtual Private Network
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