



Written by Isaac Coleman

# Proxies 101

The Complete Guide To What Proxies Are,  
How They Work,  
And Why You Need Some

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# Introduction



Welcome. I'm Neil, the founder and CEO of Blazing SEO.

Eight years ago, I was using proxies and servers myself, and frustrated by the lack of reliable options available. Seven years ago, in an effort to fill that void, I founded this company and started running it by myself in a basement. Today it's recognized as one of the finest proxy and server providers on the market, and is run by an expert team I'm proud to come to work with.

But why should we hoard that expertise for ourselves? I firmly believe that your success is our success. That's why I am very proud of what you're reading now: our first (and by no means last) eBook on proxies and the proxy market. Expect many more such books in the future as we work to make this industry a better place for everyone, regardless of your level of knowledge coming into it.

*Neil Emerigh*

# Introduction



Hi! I'm Isaac Coleman, Blazing's Senior Marketing Specialist and author of the book you now hold in your hands. Well, okay, you're probably holding some kind of eReader in your hands, but I still wrote what's on it.

In my time with Blazing SEO, I've been privileged to see the ways in which our thousands of customers have used proxies to change the world – and their businesses – for the better. The ways in which the proper application of IP addresses is rapidly transforming industries like marketing, eCommerce, and even music are still astonishing to me, even now.

That's why it's such a distinct pleasure to present this comprehensive introduction to the world of proxy IP addresses. If you're a newcomer to proxies, I hope this guide helps you get up and running quickly with some IPs of your own. And if you're already using proxies, I hope this guide helps you level up your knowledge so you can use them more effectively and have a better understanding of all that this industry has to offer.

A handwritten signature in black ink, appearing to read 'Isaac Coleman', written in a cursive style.

# 1

# What is a Proxy?

# 1

## What is a Proxy?

### What is an IP Address?

Every device that's connected to the Internet is represented by a unique combination of numbers and letters known as an **Internet Protocol address**, or IP address for short.

In some ways, you can think of an IP address as analogous to the physical address of a building. Both serve the same purpose: identification and location addressing. **Identification**, in this case, means applying a unique name to something, while **location addressing** just means identifying that thing's general location.

If you said that you lived in "that one two-story pink house," no one would know what you're referring to. If you say that you live at "742 Evergreen Terrace, Springfield, USA," you have *identified* yourself as living in a single *location* using an address that cannot be applied to any other building.

# 1 What is a Proxy?

However, IP addresses differ in function from physical addresses in a few key ways. One is that the location addressing is not nearly as precise. The websites you visit can usually figure out the country your IP address is coming from, maybe even the city, but certainly not the street address.

Second, and more importantly: **IP addresses are not associated with a physical object.** People often assume that IP addresses are tied to a particular device, like a laptop or a phone, but they're actually tied to a *connection* between a device and the Internet. So when you're using your tablet at home, you have a completely different IP address than when you're using that same tablet on a restaurant's Wi-Fi.

Understanding that IP addresses are associated with connections and not devices is critical to understanding proxies.

## What are Proxies?

A proxy, in computer networking, is simply an intermediary that passes requests between a device and a network.

But when we refer to "proxies" in this guide, and when most people online refer to "proxies," they are talking specifically about **proxy IP addresses.** As the name implies, these are IP addresses that act as an intermediary between you and the website or server you're connecting to.



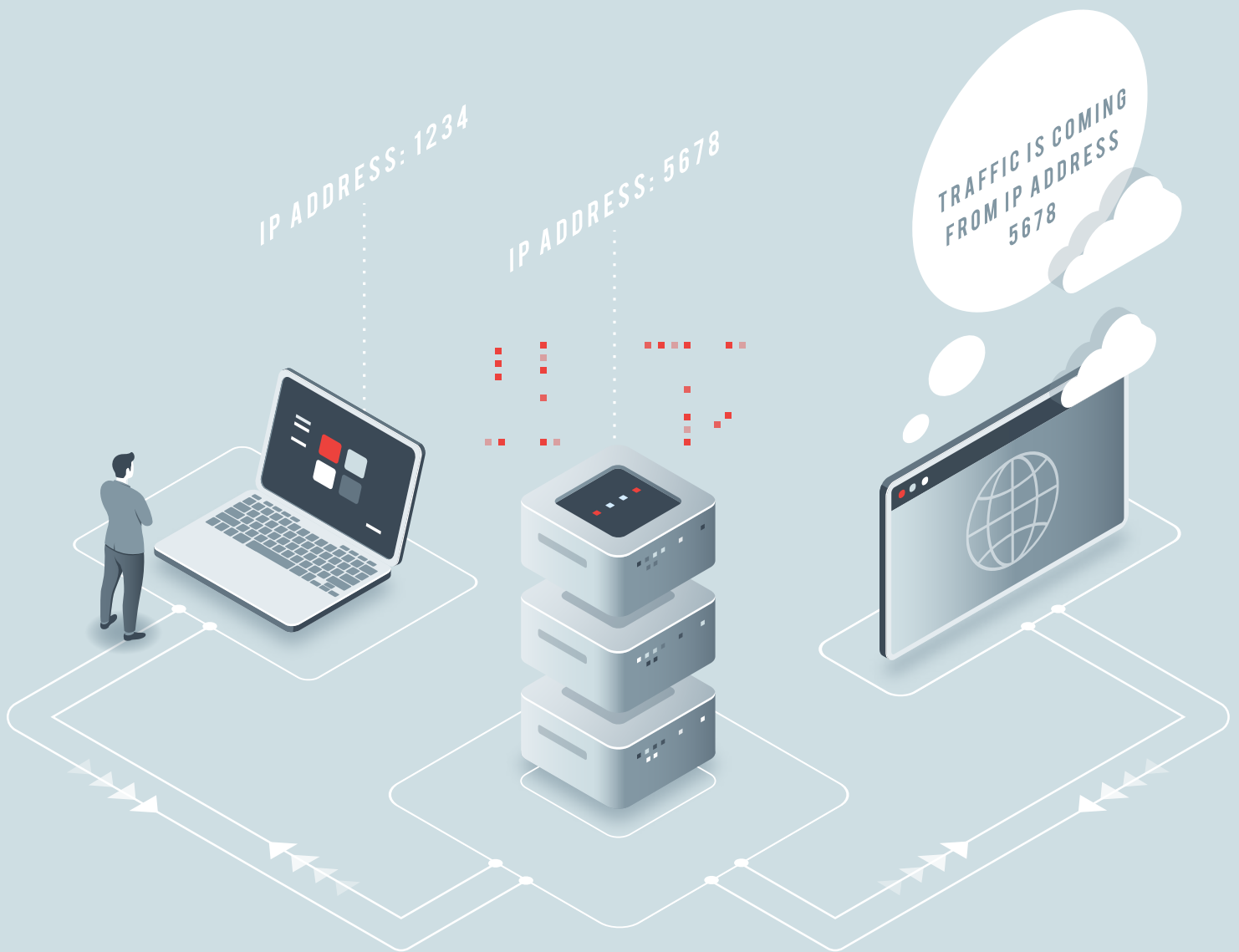
# 1 What is a Proxy?

If this image signifies normal Internet use:



# 1 What is a Proxy?

Then this image shows how accessing the Internet changes with a proxy IP:

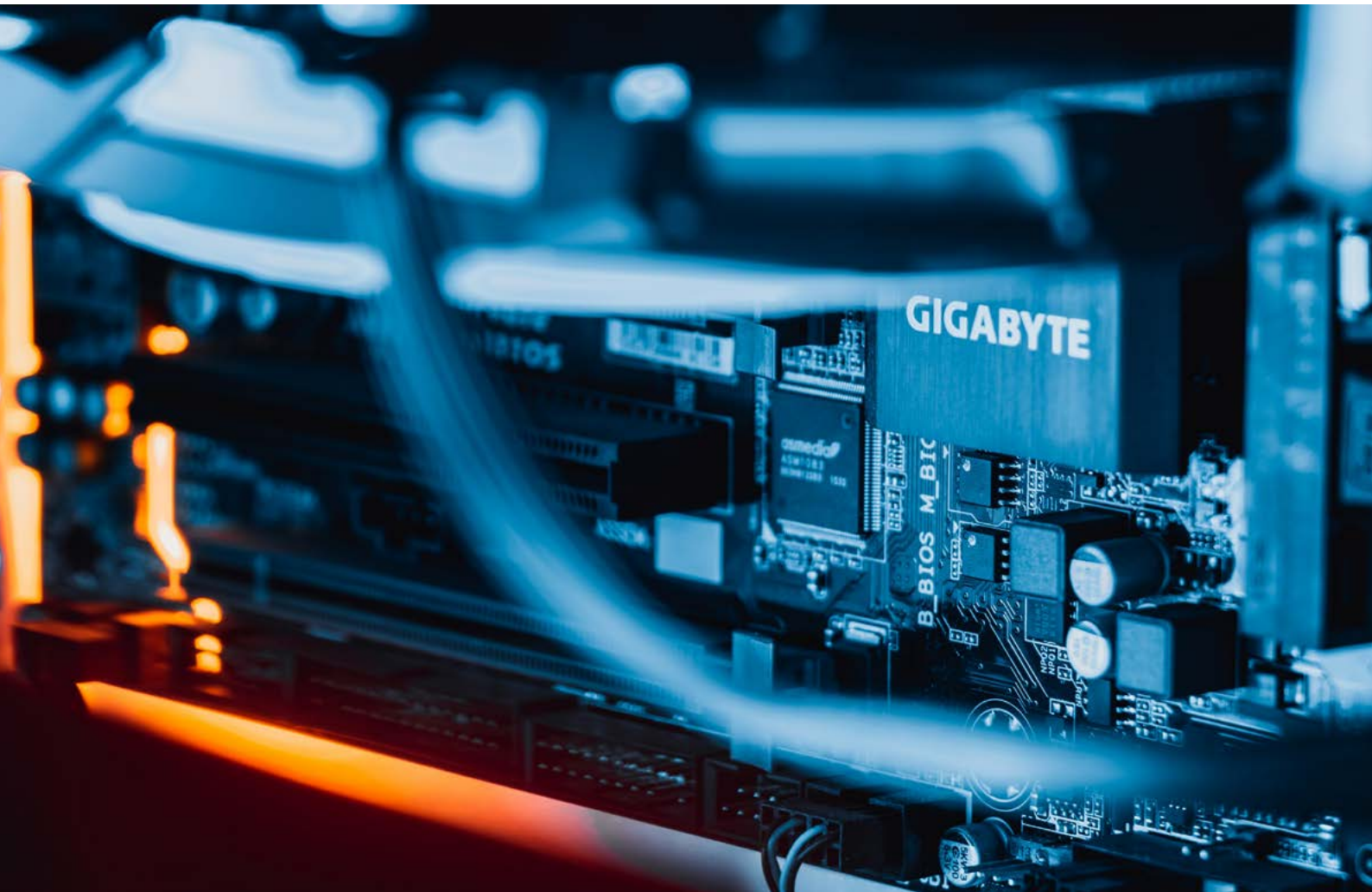


# 1 What is a Proxy?

## What is a Proxy Server?

You may have heard the terms “proxy,” “proxy IP address,” and “proxy server” used interchangeably. This is not entirely accurate. A server refers to the physical or virtual machine that *contains* one or more proxy IP addresses.

Though there are rare use cases where someone would want to own an entire server, many beginning proxy users are confused by the terminology and will search for a “proxy server” when, in truth, they’re just looking for proxy IP addresses.



# 1 What is a Proxy?

## Are Proxies Safe?

Even though the use of proxies has become commonplace in today's online environment, concerns about their safety are still among the main reasons some people hesitate to use them. Although it would be easy to say, "yes, proxies are safe — use them" the more accurate answer is that *certain* proxies are safe.

There are many websites that offer **public proxies** or **free proxies**, which are shared among any user who chooses to connect to them without charging a price. But these public servers suffer from unlimited users drawing upon their limited resources, which creates sloth-speed load times and connectivity issues.

Worse, public proxies are ideal hunting grounds for hackers and scam artists who will prey upon your sensitive information the moment you connect to them.

That's why you should always purchase proxies from a reliable source and stick to semi-dedicated, dedicated, or rotating proxies. We will cover these distinctions more in Chapter 3.

# 2

## Why are Proxies Used?

# 2

## Why are Proxies Used?

You now know that a proxy is an IP address that can be used as an intermediary between a device and the Internet at large. But why would you want to use such a thing? What are the benefits to individuals and to small businesses?

We'll cover some of the most common use cases for proxies in Chapter 4 of this guide. For now, let's look at the benefits of using proxies at a high level.

### Anonymity and Privacy

At this point, anyone working in a tech-adjacent industry (which is to say, any modern industry) is no doubt aware that privacy as a concept is largely obsolete. The major adtech oligarchs are tracking everything we do online for purposes ranging from the merely annoying to the deeply unethical.

## 2 Why Are Proxies Used?

Because proxies hide your IP address – your primary identifying marker online, and one that is tied to your physical location – they allow you to reclaim a measure of privacy in the Internet age. A large portion of Blazing SEO’s proxy user base doesn’t know anything about scraping or the large-scale proxy marketing efforts we’ll discuss in Chapter 4 – they’re just conscientious Internet users who care about privacy. And they probably hate those creepy hyper-personalized ads that pop up whenever you’re online. I mean, who doesn’t?

### Security

One of the foremost reasons for proxy use is security. Even if you trust large search and social media corporations with your user data, the process of collecting said data is infamously susceptible to bad actors like hackers. Proxies provide an extra layer of protection between you and said actors, as shown in figure 2 in the previous chapter. While hackers may have access to your proxy, they’ll have trouble reaching the server where your data is actually stored. And if you’re buying your proxy from a company that offers free, automatic replacements (like we do), it’s easy to switch out a compromised proxy for a safe one without ever jeopardizing your data.

This is especially important for businesses that deal with massive amounts of sensitive materials, such as financial institutions or insurance companies, which present enticing caches of valuable information for hackers and cyber thieves in today’s data-driven world. But even the casual browser who is worried about their personal information—such as those accessing a public Wi-Fi connection— can benefit from the protection afforded by proxies.

## 2 Why Are Proxies Used?

### Location Switching

We mentioned in Chapter 1 how your IP address is inherently tied to your device's physical location. This is true of any IP address, including those used as proxies. That means that you can use a proxy to switch the location associated with your Internet activity without ever leaving your house!

There are many reasons you might choose to do this. One is to access content that is blocked in a particular location. Citizens of countries whose authoritative governments block certain social media sites use proxies to make their voices heard. Frequent travelers use proxies to access the Internet from their home country while journeying abroad. And movie and television fans use proxies to access streamable content that's only available in certain regions (although we can't condone such use cases unless they're permitted by the streaming site's terms of service.)

Location switching can also lead to faster network speeds for certain use cases. Connecting to a server that's hosted in a particular location from a proxy that's near that location – say, connecting to an LA server from a San Francisco proxy – will yield faster connection speeds than connecting with your own IP if you're located far away from that server.

There are other, niche reasons to use location switching as well. Here at Blazing SEO, we're an international team with members in Malaysia, India, Philippines, and Ukraine as well as the United States. Certain sites and software get suspicious if a user connects from four wildly different time zones on the same day and will block that account. This is reasonable, as such unusual activity can be evidence of botting or hacking – but in our case, we're just sharing a legitimate admin account between a global team of users. How do we do so without getting blocked? By all connecting to the program in question through a proxy, of course!



# 3

# The Different Types of Proxies

# 3

## The Different Types of Proxies

Up to this point, we've been giving you a pretty simplified view of the world of proxies. If you're under the impression that one IP address is pretty much the same as another, I'm afraid it's time to disabuse you of that notion.

The number of different types of proxies can be very confusing to new users. Even more confusing is the fact that these types can overlap! You can have a rotating HTTP IPv4 proxy or a dedicated IPv6 data center proxy, but you're unlikely to find a SOCKS IPv6 or a non-rotating mobile. What?

Let's try to make sense of the gibberish with an explanation of the different types of proxies and their pros and cons.

# 3 The Different Types of Proxies

## IPv4 and IPv6

IPv4, short for “Internet Protocol version 4,” was the first type of IP address that became commonly available. It was deployed in 1983 and is still used by most Internet traffic today. But IPv4 has a problem: it wasn’t designed for the huge number of Internet-connected devices that are now being produced on a daily basis. As a result, the world has actually run out of IPv4 addresses – there are no more left to be assigned.

Enter the IPv6 address. They essentially work the same, but there’s a lot more of them – slightly fewer than 2<sup>128</sup>, to be exact.

For the purposes of proxy usage, the main benefit of IPv4 addresses is that they work with every site on the Internet. Many sites still have yet to adapt to IPv6 compatibility, although they’re going to have to change over time as the number of IPv6 users increases more and more each year.

However, if you do have a use case that can be handled with IPv6 proxies, they’re almost always the better solution. IPv6 proxies are much cheaper (because there are more of them available) and are less likely to have been used by another person who might have gotten them banned from the sites you want to access (a not-uncommon issue with IPv4 proxies.)

# 3 The Different Types of Proxies

## HTTP, HTTPS, and SOCKS

We briefly mentioned that “IP address” stands for Internet Protocol address, but savvy readers might have asked themselves: what is an Internet protocol, anyway?

The Internet Protocol is a set of standardized rules that governs how packets of data are transmitted over a network. There are many other high-level protocols that integrate with the IP to provide additional functionality. One that you may be familiar with is the Hypertext Transfer Protocol, or HTTP, which web browsers and servers use to communicate.

HTTP works great and has been in use since the 1990s, but it does not encrypt the data it sends, which means it may be vulnerable to security risks. That’s why a lot of web traffic has now switched to HTTPS, or “Hypertext Transfer Protocol over SSL”. For our purposes, all you need to know is that HTTPS is a more secure version of HTTP.

SOCKS is another protocol that does essentially the same thing as HTTP(S), but it uses a universal connection. This means that while an IP address that uses an HTTP(S) protocol can only process requests from applications that use the same protocol, SOCKS protocol IP addresses can process requests from applications that use SOCKS, applications that use HTTP, and even applications that use more obscure network protocols like POP3.

There are many reasons one might prefer to use an HTTP(S) proxy over a SOCKS proxy or vice versa – we cover them in more detail in [this blog post](#). Broadly, you should be aware that SOCKS proxies are more universal and are sometimes seen as more anonymous, but HTTP(S) proxies are better for tasks that require interpreting Internet data and traffic, such as web scraping.

# 3 The Different Types of Proxies

## Dedicated and Semi-Dedicated

Semi-dedicated proxies, also known as shared proxies, are proxies that can be used by up to three people at a time. Dedicated proxies, conversely, are the exclusive property of a single user.

If you have the choice between the two, dedicated proxies are almost strictly better. They're faster, and they grant you full control over your proxy usage, which means you don't have to worry about someone you're sharing the IP with doing something suspicious that gets you banned from a site.

However, semi-dedicated proxies are much cheaper, making them an acceptable compromise for users on a budget.

## Rotating

Rotating proxies are proxies that assign a new dedicated IP address for every connection. So if you have a piece of software that makes a thousand concurrent network requests, those requests will be made using a thousand different IP addresses.

Unsurprisingly, rotating proxies are more expensive than dedicated or semi-dedicated proxies. However, they maximize anonymity and minimize your chances of getting banned. They are especially ideal for use cases that require huge numbers of IP addresses (like web scraping).

# 3 The Different Types of Proxies

## Data Center

All of the types of proxies we've mentioned above are examples of data center proxies. The name's a dead giveaway here – data center proxies are IP addresses that are hosted in, and associated with, a server in a data center.

We mention the distinction largely because there are two other types of proxies that differentiate themselves from data center IPs. One type is mobile proxies, which are hosted on a mobile device – we'll discuss them in more detail below.

The other type of non-data center proxies are residential proxies, which Blazing SEO does not sell and strongly advises proxy users to avoid. Residential IPs are those provided by an Internet service provider to a homeowner (the modem you bought from your cable company is associated with one.)

Residential IP addresses are sometimes seen as less likely to get banned, but they are often obtained illicitly (stolen from ISPs). For more on why we feel data center proxies are better than residential proxies, you can read [our blog post on the subject](#).

# 3 The Different Types of Proxies



## Mobile

“LTE proxies,” “3G proxies,” “4G proxies,” and “mobile proxies” all refer to the same thing: proxy IP addresses that are routed through a major telecom provider (like Verizon or Sprint.) Typically, mobile proxies come from a real mobile device instead of a server in a data center. This makes the IP address appear more authentic to websites that you are using the proxy on.

As with data center proxies, mobile proxies are available in dedicated, semi-dedicated, and rotating variants.

# 4

# How to Use a Proxy



# 4

## How To Use a Proxy

Broadly, there are two ways to use proxies. You can set them up with a browser, so that all of your Internet traffic on that browser is routed through the proxy, or you can set them up with your operating system, so that all of your Internet traffic on that device is routed.

If you want to use proxies with specific software, like a web scraper or a bot, you should consult the software's documentation on setup and use.

# 4 How To Use a Proxy

## How to Set Up Proxies

Each proxy seller will have slightly different requirements for setting up your proxies.

First, you will need to complete some kind of **authorization**. Sellers require this to make sure that their IP addresses are only being used by customers who paid to do so. The most common types of authorization are user:pass authorization, which requires you to use your proxies with a username and password, and IP authorization, in which you give your device's IP address to the proxy seller.

You will also need to select geolocation settings so that the seller can assign you IP addresses that come from the country, state, or city you want to connect from. Further setup may be required as well – check with your proxy seller to see what they require.

“

**Each proxy seller will have slightly different requirements for setting up your proxies.**

# 4 How To Use a Proxy

## How to Use a Proxy with a Browser

There are too many web browsers for us to provide detailed instructions for all of them here. And besides, as we all know, the user interfaces of browsers can change with every update. That's why we strongly recommend you check out our blog post [here](#), which we keep up-to-date with detailed instructions for setting up browser proxies in any web browser.

The good news is that, for most browsers, setting up a proxy is fairly straightforward. Somewhere in the options menu there will be a place to manage “Manual proxy configuration” or “Manual proxy settings”. Once there, you simply copy and paste your proxy's IP address, the port number, and (where applicable) the username and password used to authorize your proxy into the boxes provided.

The **port number** of your proxy is a portion of the addressing info used to distinguish the receivers and senders of messages within a network. Port numbers let multiple applications on the same device share network resources. In a practical sense, the port number will mostly be used to define whether you're using a proxy with the SOCKS protocol, the HTTP protocol, or the HTTPS protocol, as defined in the previous chapter.

## 4 How To Use a Proxy

### How to Use a Proxy with an OS

Again, every operating system has different instructions for setting up proxies. If you're using a Windows or MacOS computer, like most of our users, we advise you to consult Microsoft's documentation for configuring proxy settings [here](#) and Apple's documentation for configuring proxies [here](#).

### How to Use Proxies with Static IP Tunneling

An **IP tunnel** is a network communication between two different IP addresses. It involves encapsulating one IP packet inside of another with a format native to the transit network.

Hmm. Maybe we should re-write that in laymans' terms.

We all still live and work on an IPv4 internet. That means that we can easily type IPv4 addresses into a browser, OS, or piece of software and it will know how to work with that address. IPv4 connections are the norm.

The same is not true of IPv6 and mobile proxies. So how can you use them with Internet connections that are expecting an IPv4 address? Simply: you *give* them an IPv4 address, one which has the IPv6 and mobile address encapsulated inside of it. This is done using a technique called **static IP tunneling**.

# 4 How To Use a Proxy

Fortunately, you don't have to know how this works. Your provider will take care of setting up the tunnel for you. All you have to know is that whenever you purchase IPv6 or mobile proxies, your proxy seller will provide you with an additional IPv4 address. Here's what that looks like at Blazing SEO:

	A	B	C	D	E
1	111.22.33.44	4444	blazingtest1-1-1	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa00
2	111.22.33.44	4444	blazingtest1-1-2	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa01
3	111.22.33.44	4444	blazingtest1-1-3	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa02
4	111.22.33.44	4444	blazingtest1-1-4	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa03
5	111.22.33.44	4444	blazingtest1-1-5	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa04
6	111.22.33.44	4444	blazingtest1-1-6	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa05
7	111.22.33.44	4444	blazingtest1-1-7	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa06
8	111.22.33.44	4444	blazingtest1-1-8	p4ssw0rd	0000:aaaa:00aa:0aa0:00a0:a000:0a00:aa07

**IPv4 Address**  
(This stays the same for each IP!)

**Port**

**Username**  
(This will change for each IP!)

**Password**  
(This stays the same for each IP!)

**IPv6 Address**

Just input the IPv4 address into your browser of choice and enter the relevant username and password when prompted. Then check your current IP address as described in the next section. You will see that, even though you never typed it into your browser, your traffic will be coming from the IPv6 address associated with the username you used.

## 4 How To Use a Proxy

### How to Check your Proxies

Once you've set up your proxies, how can you check to see if they're working? The easiest way is to use a third-party tool to check. Google has made this easier than ever – simply type “my ip” into Google and it will display what it sees as your IP address. If what it displays matches the IP address of the proxy you've set up, you're good to go. (If it doesn't, you can try [one of these fixes](#) or contact your proxy provider and see if they can fix the issue for you.)

### How Proxies are Used

One of my favorite things about working at Blazing SEO is seeing the amazing ingenuity and creativity of our users. There are many, many use cases for proxies – far more than we could cover in a full book, let alone a single chapter (though we're doing a pretty thorough job [on our blog](#).)

It should also be noted that many of the common use cases for proxies violate use cases and may be considered a legal “grey area” or worse. To that end, please note that all information in this chapter is presented solely for the purposes of education and furtherance of the knowledge of the reader. By writing about a use case here we are not condoning or endorsing using proxies for such a purpose. To that end, here are some ways users might use a proxy. Please note that this chapter does not cover data scraping, one of the most common proxy use cases, because that is the focus of Chapter 5.

# 4 How To Use a Proxy

## Gaming

Proxies allow gamers to access their favorite multiplayer games from somewhere closer to the server where said games are hosted, which can improve those all-important connection times and reduce lag. They also allow players to game anonymously if they're playing a game by a company (of which [there are many](#)) that harvests user data one might prefer to be kept private.

Proxies can also be used to access location-specific videogame content or for cheating or botting purposes. The latter is why many game publishers' terms of service explicitly prohibit the use of proxies.

## Accessing Blocked Sites

There are many reasons one might find themselves blocked from a site. Maybe the site's content is location-specific, like the popular BBC iPlayer streaming service. Maybe the site detected the behavior of a bot (we'll discuss this more in the next chapter.) Whatever the reason, bans and blocks usually occur at the IP address level, which means that changing your IP address with a proxy will allow you to access content that you are blocked from.

# 4 How To Use a Proxy

## Shopping

Proxies are often used with bots to purchase limited-edition items from eCommerce websites. Let's say, for example, that you desperately wanted a limited-edition pair of sneakers. Collectors' edition sneaker pre-orders are limited to a short window of time and a small number of units, so the best way to make sure you can get a pair is by using a bot to constantly refresh the page and submit a purchase request as soon as the sneakers become available.

Now, any eCommerce website in the modern era can tell the difference between web traffic that's coming from a real human and the thousands-of-requests-per-minute web traffic that comes from a bot. As soon as they detect the latter, they will ban the bot's IP address. That's why such a bot needs to be loaded with proxy IP addresses, so that it can quickly switch to an unbanned IP as soon as the ban occurs.

Even if you're not using bots, proxies can be used to purchase multiple copies of an item that would be limited to one per customer or, once again, to access location-specific online shopping.

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**Proxies are often used with bots to purchase limited-edition items from eCommerce websites.**



# 5

# Proxies and Scraping

# 5

## Proxies and Scraping

In the last chapter, we neglected to discuss one of the biggest use cases for proxies. That's because web scraping or data scraping (the terms are interchangeable for our purposes) is such a significant topic that it could be the subject of its own book, let alone its own chapter.

Web scraping is the process of collecting publicly available information from a webpage. It's referred to as "scraping" because the tool that collects the data "scrapes" the information that's valuable to you from the rest of the information on the page.

For example: if you were to use the [Facebook scraper](#) provided by our friends at [Scraping Robot](#) and input the URL of a Facebook page, the scraper would automatically return the page's likes, follows, and checkins, along with a complete list of the posts made by that page and the reactions those posts got.

This is all information you could find yourself, of course, but it would take you a long time, especially if you wanted to look at hundreds or thousands of Facebook pages at once. A scraper can find that information in seconds.

# 5 Proxies and Scraping

## Why Use Scraping?

We live in the Information Age. About 2,500,000,000,000,000,000 bytes of data are created every day, and the rate is only increasing. Buried in that data is a tremendous amount of valuable information. The complete repository of human knowledge. The thoughts, wants, and needs of nearly eight billion people making their voices heard online.

This is information that businesses can take advantage of to make strategic decisions and market their products in a way that matches the needs and wants of their consumers. But only if they have a way to sift through all those bytes to find the information they really need, quickly and at scale.

## Where do Proxies Come In?

Scrapers work by visiting thousands of pages a second, extracting the relevant information from each page in a fraction of the time it would take you to collect it on your own. Naturally, the behavior of a scraping bot looks nothing like the behavior of a human using the Internet. Websites recognize this behavior and ban the IP address it's coming from.

That's why scraping bots are designed to function with lots of proxies. When one IP gets banned, the bot will automatically switch to another and pick up scraping where it left off. Depending on the size of the scraping job and how strict a site's anti-botting protections are, finishing an entire data scraping project may take up to tens of thousands of proxies.

# 5 Proxies and Scraping

## What is Scraping Used For?

Again, there are far more use cases than we can possibly cover here – and the only limit to the uses of scraping is your imagination! But here are a few of the uses we've run across. As before, we do not condone using proxies with any of these use cases on sites where scraping is prohibited by the legally binding terms of use, but are merely presenting them for educational purposes.

### **eCommerce**

For online sellers, competitive analysis is essential. Scrapers are used to look for price arbitrage and to keep an eye on the pricing, description, and reviews of other product pages similar to one's own.

### **Marketing**

Sentiment analysis – a hundred-dollar word for “keeping an eye on what people are saying about you on social media” – is an essential area of digital marketing that would be impossible without the use of web scrapers. Scraping is also used a great deal in SEO, whether you're scraping on-page keywords or scraping Google search results to see where you rank.

### **Social Media**

Social media mavens have found many ways to make use of web scraping. These include the aforementioned sentiment analysis, finding new people to follow who are likely to follow back, and analyzing the performance of popular pages in their niche.

# 5 Proxies and Scraping

## Job Scraping

Let's tread lightly here. Job scraping has long been a popular use of proxies and scraping bots. Recruiters looking can use scrapers to look for specific keywords and find qualified candidates to reach out to on job sites (like the very famous one that starts with "L").

However, that same very famous site has recently been involved in a very high-profile court case trying to prove that scraping even public information from sites like theirs is illegal. Let me again urge you to never use proxies for any purpose that is not fully compliant with the law in your area.

## And More!

Farm auctions, real estate listings, music app analytics – these are just a few of the strange and wonderful things Blazing SEO proxies have been used to scrape. Our partner company, Scraping Robot, has [their own blog](#) where they write about the many use cases of data scraping, so we highly encourage you to look there for more information on all things scraping.

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**Farm auctions, real estate listings, music app analytics – these are just a few of the strange and wonderful things Blazing SEO proxies have been used to scrape.**

# 6

# What to Look For When Buying a Proxy

# 6

## What to Look For When Buying a Proxy

Congratulations! You are now an expert in the uses of proxies and the technology that makes them work. The next step is clear: it's time to buy some.

In this section, we'll cover some of the most important features to look for when you're buying a proxy and define the terms proxy sellers use to try to win your business.

### Products and Regions Available

Before you purchase proxies, you presumably have a use case in mind. You should also consider what type of proxy (see Chapter 3) fits this use case best. Do you need proxies that have never been used before? IPv6 is your best bet. Are you just using these proxies to connect to the Internet? If so, HTTPS would be safest. If not, you may need a SOCKS proxy.

## 6 What to Look For When Buying a Proxy

You should also consider your location needs. If you're going to use a proxy to connect to a videogame, check where that game's servers are. If you want to access a site that has location-specific content, like a streaming service that's only available in one country, make sure to find a seller who provides proxies from that location.

If you're just using a proxy to gain some anonymity and security while you go about your normal Internet activity, you probably just want to buy a proxy from a different part of your own home country.

## Bandwidth Limits and Speed

Now that you've found a seller who's providing the type of proxy you need in the region you're looking for, check their bandwidth limits and the speed of their proxies. Nothing's more frustrating than when you connect to the Internet with a proxy only to find that your browsing has slowed to a crawl. No one should have to choose between anonymity and convenience.

And if you're working with a use case that requires a large volume of data (like web scraping), slow speeds and bandwidth limits can be a death sentence.

Try to find a seller that provides unlimited, unmetered bandwidth and threads along with speeds of at least 1 Gbps.



## 6 What to Look For When Buying a Proxy

### Free Automatic Replacement

When using proxies, bans are all but inevitable. Even if you yourself don't get banned, when you buy IPv4 proxies you're almost always using IPs that were used by somebody else beforehand. It's very possible that that person got the IP banned from a site you want to visit.

So what can you do? Well, most proxy sellers will have some kind of replacement policy, allowing you to swap out your proxy IP addresses with others of the same type and location if they're not working out for you. When browsing these policies, the words you're looking for are "free automatic replacement". You don't want to have to pay extra to replace proxies when they get banned for something that wasn't your fault, and you don't want to have to go through the hassle of replacing them yourself. Most proxies will limit the number of free replacements (at Blazing, you get one per IP per month), but you want at least some kind of guarantee that you can shoulder bans without stopping your use case entirely.

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**When using proxies, bans are all but inevitable.**

# 6 What to Look For When Buying a Proxy

## Diversity

If you have a use case that requires more than a few proxies, choosing a provider that has significant subnet diversity is essential.

A **subnet** is a block of IP addresses. In IPv6 addresses, there are three commonly-used sizes of subnets. **Class A** subnets consist of 16 million IP addresses, **Class B** subnets consist of 65 thousand subnets, and **Class C** subnets consist of 254 subnets.

When websites detect usage they don't like (such as that of a scraping bot), they often ban the offending IP address. But they might also mass ban the whole subnet of IP addresses, especially if they detect multiple offending users using similar IP addresses.

Most ISPs that lease to proxy companies have a large single class A subnet, which means that you're more likely to be affected by a mass ban caused by the activity of other users. Demand better – look for providers that offer tens of thousands of C class subnets spread over dozens of unique B and A classes.



# Conclusion

I hope you've enjoyed this guide to the world of proxies and found it useful. As you can see, though proxies may seem complicated to an outsider, they're actually quite simple to use, and almost anyone who lives and works online has a reason to take advantage of them.

*Blazing SEO is trying to be the single most reliable and readable source of proxy information on the web. Want to suggest a future eBook topic? [Click here to get in touch!](#)*