

Guide to IPv6 - How to Get Started With IPv6

Guide to IPv6

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Overview

To use IPv6 on your cPanel & WHM server, you **must** acquire IPv6 addresses and add them to your server. You can then assign the server's shared IPv6 address and assign IPv6 addresses to the desired users.

Note:

The steps in this document require that your server runs cPanel & WHM version 54 or later.

Configure IPv6 on your server

Acquire an IPv6 range.

To acquire an IPv6 address range, contact your Internet Service Provider (ISP). Most ISPs assign IPv6 addresses in large blocks or ranges.

We recommend that you request IPv6 addresses for the following purposes:

- A single IPv6 address for the server itself, which you can assign to individual accounts as a shared IP address.

Warning:

Make **certain** that you request an IPv6 address that does not exist within the requested IPv6 range. The system blocks shared IPv6 addresses that exist within IPv6 ranges.

- An IPv6 range to use to assign individual dedicated IPv6 addresses to accounts.

Notes:

- We recommend that you request an IPv6 address range with a /64 network portion, the most common network portion for the shared hosting industry. However, network portions may be as low as /48, or as high as /128, which represents a single IPv6 address.
- When you acquire IPv6 addresses, make **certain** to update your Reverse DNS entries. Some ISPs update these entries for you, while others require you to maintain them.

Ping another server from the IPv6 server.

To confirm that your server can reach other servers via IPv6, run the following command as the `root` user on your IPv6 server:

```
ping6 ipv6.google.com
```

If IPv6 functions on your server, this command's output resembles the following example:

```
PING ipv6.google.com(2001:4860:b002::68) 56 data bytes
64 bytes from 2001:4860:b002::68: icmp_seq=0 ttl=59 time=58.4 ms
64 bytes from 2001:4860:b002::68: icmp_seq=1 ttl=59 time=56.4 ms
64 bytes from 2001:4860:b002::68: icmp_seq=2 ttl=59 time=62.1 ms
```

Important:

If the command's output does **not** resemble this example, IPv6 does **not** function on your server. You **must** resolve this issue before you can use cPanel & WHM with IPv6.

Ping the IPv6 server from another server.

To confirm that other servers can reach your server via IPv6, run the following command as the `root` user on another server:

```
ping6 2001:db8:10fe::5000
```

Note:

In this example, replace `2001:db8:10fe::5000` with your server's IPv6 address.

If IPv6 functions on your server, this command's output resembles the following example:

```
PING 2001:0db8:85a3::8a2e:0370:7334 56 data bytes
64 bytes from 2001:db8:10fe::5000: icmp_seq=1 ttl=62 time=0.847 ms
64 bytes from 2001:db8:10fe::5000: icmp_seq=2 ttl=62 time=0.994 ms
64 bytes from 2001:db8:10fe::5000: icmp_seq=3 ttl=62 time=0.909 ms
```

Important:

If the command's output does **not** resemble this example, IPv6 does **not** function on your server. You **must** resolve this issue before you can use cPanel & WHM with IPv6.

Ensure that the `cpsrvd` daemon listens on IPv6

Navigate to the [System](#) section of WHM's [Tweak Settings](#) interface (*WHM >> Home >> Server Configuration >> Tweak Settings*) and select *On for the Listen on IPv6 Addresses* setting.

This setting ensures that the `cpsrvd` daemon listens on IPv6 in addition to IPv4.

Configure the server's shared IPv6 address.

To configure the server's shared IPv6 address, perform the following steps:

1. Navigate to WHM's [Basic WebHost Manager Setup](#) interface (*WHM >> Home >> Server Configuration >> Basic WebHost Manager Setup*).

2. Enter the desired shared IPv6 address in the *The IPv6 address (only one address) to use to set up shared IPv6 virtual hosts.* text box.

Note:

After you configure this setting, BIND automatically begins to listen for DNS requests via IPv6.

3. Click *Save Changes* at the bottom of the interface. A confirmation message will appear.

Important:

An IPv6 address range **cannot** contain a server's shared IP address. The system will **not** allow you to set a shared IP address that exists within any configured IPv6 address range.



Add IPv6 ranges to the server's available IP addresses.

To add IPv6 address ranges from which you can assign dedicated IPv6 addresses, use WHM's *IPv6 Ranges* interface (*WHM >> Home >> IP Functions >> IPv6 Ranges*).

To add a range of IPv6 addresses, perform the following steps:

1. Click *Add Range*.
2. Enter a name for the IPv6 address range in the *Range Name* text box.

Note:

This name **must** contain 64 characters or fewer.

3. Enter the IPv6 address range in the *Range* text box. IPv6 address ranges consist of a shortened IPv6 address, a slash (/), and a number that indicates the network portion of the IPv6 address range. For example:

```
2001:0db8:1a34:56cf::/64
```

Important:

- Do **not** add an IPv6 address range that contains the main IPv6 address that you set in WHM's *Basic WebHost Manager Setup* interface (*WHM >> Home >> Server Configuration >> Basic WebHost Manager® Setup*).
- You **must** add your gateway individually before you add the full gateway range and set the gateway to *RESERVED* so that the system does not assign this IP address to an account. For example:

```
2001:0db8:1a34:56cf::/128 RESERVED  
2001:0db8:1a34:56cf::1/128 RESERVED
```

4. Select one of the following range types from the *Range Type* menu:
 - *Available* — You can distribute the addresses in this range to the users on your server.
 - *Reserved* — You **cannot** distribute the addresses in this range to the users on your server.

Note:

If you select *Reserved*, WHM's *Assign IPv6 Address* interface (*WHM >> Home >> IP Functions >> Assign IPv6 Address*) will **not** list the range.

5. Enter a description of the IPv6 address range in the *Range Notes* text box.

Note:

This description **must** contain 256 characters or fewer.

6. Click *Add Range* to add the IPv6 address range, or click *Cancel* to close the form.

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Assign dedicated IPv6 addresses to individual accounts.

To assign addresses to individual users, navigate to WHM's *Assign IPv6 Address* interface (*WHM >> Home >> IP Functions >> Assign IPv6 Address*) and select the desired cPanel account.

To assign an IPv6 address to the selected account, perform the following steps:

1. Select the desired IPv6 address range from the *Enable this account with an IPv6 address from the selected range* menu.
 - You **must** select a range that includes available addresses.
 - To assign the server's shared IPv6 address to an account, select *The server's shared IPv6 address*. This address functions as a shared, rather than dedicated, address.

Note:

Your server may use a Stateless Autoconfigured Address (SLAAC) address that your MAC address determines. This address changes if your hardware changes. For example, if you replace your ethernet card, the new card receives a new IPv6 address. This causes the old address's VirtualHosts to use the wrong IPv6 address.

2. Click *Enable Account*. When you enable IPv6 on an account, the system performs the following actions:
 - Binds that IPv6 address to your server
 - Adds an AAAA record for the account to the primary DNS zone.

Note:

An enabled account maintains its IPv6 address information even if you enable it again with a different IPv6 address range.

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Configure additional IPv6 settings on the server.

We recommend that you configure the following additional IPv6-related settings on your cPanel & WHM server:

- Add IPv6 addresses to any other desired Exim configuration settings in WHM's *Exim Configuration Manager* interface (*WHM >> Home >> Service Configuration >> Exim Configuration Manager*).
- Enable the *Enable IPv6* setting in WHM's *Mailserver Configuration* interface (*WHM >> Home >> Service Configuration >> Mailserver Configuration*).
- Add any remote mail servers that use IPv6 addresses in WHM's *Configure Remote Service IPs* interface (*WHM >> Home >> IP Functions >> Configure Remote Service IPs*).

Troubleshoot issues.

For help with IPv6 problems, read our [Troubleshoot IPv6 Problems](#) documentation.

Additional documentation

Suggested documentation [For cPanel users](#) [For WHM users](#) [For developers](#)

- [Guide to IPv6](#)
- [Guide to IPv6 - How to Get Started With IPv6](#)
- [Guide to IPv6 - IPv6 Server Administration](#)
- [Guide to IPv6 - Troubleshoot IPv6 Problems](#)
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