

# DNS FAQ

For cPanel & WHM version 11.52

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## What is a nameserver?

In their simplest form, nameservers match domain names to IP addresses and share your server's domain names and IP addresses with the Internet. Without nameservers, potential visitors can only access your server and its websites via IP address.

- When a visitor enters a URL into a browser, the computer queries the nameserver for the IP address that corresponds to the domain name that the visitor specified.
- After the visitor's computer has this information, the browser can access the website that you requested.

Nameservers also share information with other nameservers. This allows visitors to quickly and efficiently access websites that your server hosts.

- This concept is called propagation.
- When you first set up a website, its DNS information may require several days to propagate throughout the Internet. This delay means that some visitors may be temporarily unable to access the website.

## What is the difference between DNS software and DNS records?

DNS records are the resources within a zone file that map domain names and other services to their IP addresses.

- A DNS record can specify which mailservers exist for a given domain.
- These records also identify which nameservers contain authoritative information about your domains and services.



### Important

Your server's local zone files **must** match the domain information that you specified to the registrar.

The nameserver software on your server manages nameserver records. cPanel & WHM offers three nameserver software options: BIND, NSD, and MyDNS.

## Why do I have to update nameserver records at the registrar?

When you update your nameserver records at the registrar, the registrar can push your domain's DNS information to their DNS namespace.

## What is an authoritative nameserver?

Authoritative nameservers return responses to queries for one or more zones.

- An authoritative nameserver does not cache DNS information for related domains.
- Responses from authoritative nameservers are known as *authoritative answers*.
- You can configure an authoritative nameserver to return authoritative answers for some zones while it caches information for other zones.

## What are the differences between local, private (custom), clustered, and remote nameservers?

- **Local** — Local nameservers are authoritative nameservers. They reside on the same server that hosts the nameserver's cPanel accounts.
- **Clustered** — Clustered nameservers are part of a collection of nameservers that all share information and authoritative nameserver status. These nameservers prevent down time. If one server fails, additional servers are available to perform the necessary functions.



### Important:

Do **not** confuse a DNS cluster with a [configuration cluster](#).

- **Private or Custom** — This type of nameserver is a custom-branded or vanity alternative name for the authoritative nameserver.
- **Remote** — Remote nameservers are authoritative nameservers that a separate server hosts.

## What is the difference between DNS clusters and the default local nameserver setup?

You can cluster software to ensure that all of the nameservers that are in the DNS cluster contain the same information. Clustered software also shares DNS information with servers that are external to the server that actually hosts the website.

- Some registrars require this configuration, but most do not.
- In larger server deployments, you can offload DNS to a DNS cluster configuration to lessen the load on the local sever as well.
- For more information about how to deploy a DNS cluster within WHM, read our [DNS Cluster](#) documentation.

## Do I need to use DNSONLY to create a DNS cluster?

No. You can create a DNS cluster on several cPanel & WHM servers without DNSONLY.

You can also configure BIND to create a DNS cluster with non-cPanel & WHM servers. However, we do **not** support this configuration.

## Where are my DNS zone files stored?

cPanel & WHM stores zone files in the `/var/named` directory, regardless of the selected nameserver software.

## What if my DNS zones will not load?

If your server is part of a DNS cluster, and your DNS zones will not load, delete the temporary files in the `/var/cpanel/dnsrequests_db` directory.

To do this, run the following commands:

```
cd /var/cpanel/dnsrequests_db
rm *
```

Whenever the `dnsadmin` process runs, it checks all of the files in the `/var/cpanel/dnsrequests_db` directory. If the `dnsadmin` request has a large number of files to check, the request may time out before the system loads your DNS zones.

Open the `/var/cpanel/dnsrequests_db.last_clean_time` file and check the most recent date on which the system cleared the `/var/cpanel/dnsrequests_db` directory. We recommend that you set up a cron job to clear the directory on a regular basis.

If your DNS zones still do not load, [open a support ticket](#).

## Additional Resources

- [Simple DNS Zone Editor](#) — The *Simple DNS Zone Editor* interface allows cPanel users to edit user-defined CNAME and A records in a zone file.
- [Advanced DNS Zone File Editor](#) — The *Advanced DNS Zone Editor* interface allows cPanel users add and edit user-defined CNAME, A, and TXT records in a zone file. cPanel users can also use this interface to reset all of the information in a specified zone file.
- [How to Configure Reverse DNS for BIND in WHM](#) — This document explains how to set up and configure reverse DNS (rDNS).
- [Nameserver Selection](#) — This document explains how to change your nameserver software and the differences between available nameserver software.
- [How to Convert a cPanel & WHM Server into a cPanel DNSONLY Server](#) — This document describes how to convert an existing cPanel & WHM server into a cPanel DNSONLY server.