

# DNS FAQ

## DNS

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## DNS

### 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 in 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 (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 mail servers 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.
- Authoritative nameservers return responses (authoritative answers) to queries for one or more zones.
- 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.

## Where does the system store my DNS zone files?

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 belongs to 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 command:

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

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](#).

## DNSONLY

### What is cPanel DNSONLY?

cPanel DNSONLY™ software allows you to run a dedicated physical nameserver. It is the "bare-bones" version of cPanel & WHM, and **only** replicates DNS zones from your other servers.

### How do I create a DNSONLY server?

To install cPanel DNSONLY on a non-cPanel & WHM server, follow the steps in our [cPanel DNSONLY Installation Guide](#) documentation.

### What should I do after I create a DNSONLY server?

After you create a cPanel DNSONLY server, add your cPanel DNSONLY server to a DNS cluster in WHM's [DNS Cluster](#) interface (*WHM >> Home >> Clusters >> DNS Cluster*). For more information about DNS Clusters, read our [Guide to DNS Cluster Configurations](#) 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.

### Why does the WHM User Interface on my cPanel DNSONLY server show a Trial License banner?

A *Trial License* banner appears in your WHM *Home* interface if your server currently possesses a 15-day trial cPanel & WHM license. The cPanel DNSONLY software does **not** require a license to function.

To remove the *Trial License* banner, you must remove the cPanel license from the server. To do this, perform the following steps:

1. Contact the [cPanel Customer Service](#) department and request that they deactivate your trial license.

2. Create a directory to which to move the cPanel license files.
3. Move the `cpanel.lisc` file and the `/root/.cpanel/datastore/_usr_local_cpanel_cpanel_-F` file to the directory that you created. To do this, run the following commands:

```
mv /usr/local/cpanel/cpanel.lisc /root/trashfiles/  
mv /root/.cpanel/datastore/_usr_local_cpanel_cpanel_-F /root/trashfiles/
```



**Note:**

In the above commands, `trashfiles` represents the directory into which to move the cPanel license files.

4. Restart cPanel DNSONLY. To do this, run the following command:

```
/usr/local/cpanel/scripts/restartsrv_cpnsrvd
```

## Additional documentation

- [DNS FAQ](#)
- [DNS Cluster](#)
- [Installation Guide - Customize Your Installation](#)
- [Remote Access Key](#)
- [cPanel DNSONLY](#)