

Operations on DNS Zone

This page explains how to edit DNS zones and other DNS zone related operations.

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Editing a DNS Zone

In order to edit a DNS Zone, click the chosen DNS Zone name and enter the **DNS Zone management** page.

Records of zones that have been added from a remote location cannot be modified from interface. For zones added from remote locations, DNS Manager displays the following warning message:

This zone is managed by Remote Update and can not be edited in the interface.

In the **DNS Zone Information** section, you can view several details:

- **DNS Zone type:** This field displays the type of the DNS Zone, which can be **Master** or **Slave**. It also displays the number of Transfer IPs for Master zones and the number of Master IPs for Slave zones.

A slave zone will acquire its zone data only after receiving the notification from the respective master zone, or after it is manually reloaded on the server. DNS Manager does not reload slave zones due to the extra overhead involved on busy environments, therefore it is recommended to set up notifications on master zones.

- **Hosts in this zone:** Displays the first and last available IP (these parameters depend on the reverse zone IP class).

Hosts in this zone is displayed only for reverse DNS zones.

- **Last DNS Zone update:** This field displays the date when the DNS Zone was last updated by the user or from the remote update location.
- **Last DNS Zone update source:** The source of the last update. The DNS Zone can be updated from the interface or from a remote update location.

You can add new DNS Records, view and delete existing ones. Click the DNS Zone name to manage the Zone Records.

You cannot add records for Slave DNS Zones. The current Records are not displayed because the actual DNS Records are transferred from the master server(s).

In the list of existing DNS Records, the following details are available:

- **S:** Indicates whether the record is enabled or disabled. The green icon indicates that the record is enabled. Click it to disable the corresponding record. The red icon indicates that the record is disabled. Click it to enable it. The gray icon indicates that the record has been temporarily disabled by Round Robin, which hasn't been able to access it.

You can modify the records status only for zones added from the DNS Manager control panel.

- **P:** Indicates if there are any Round Robin polls monitoring the record. The blue icon indicates there are Round Robin polls set up for the corresponding record. If you click this icon, the **Round Robin polls management** page for the record will open. The gray icon indicates there are no Round Robin polls set up for the corresponding record.

This column is available only for forward zones added from the 4PSA DNS Manager control panel.

- **Host:** This field displays the host name or IP address of every DNS Record.
- **Record type:** There can be several types of records, based on the DNS Zone. More information about DNS records type are detailed in [Managing DNS Records for Zones](#).

Records can be modified only for zones added from the DNS Manager control panel.

- **Value:** Depending on the **Record type**, this field displays an IP address, an alias, a name server, a host name, or a text.
- **Replacement**
- **Priority**
- **Weight**
- **Last update:** The date when the record was last modified (from the web based interface, or by updateurl).
- **M:** By clicking the **Modify** icon, the administrator can edit the details of the corresponding DNS Record.

In the **Tools** area, you can switch the **Zone type** from Master to Slave and vice versa. Just clicking the **Switch to master** or the **Switch to slave** button.

Backup DNS zone - You can backup the respective DNS zone by clicking the **Backup DNS zone** button. To add a Master/Slave DNS server IP address, enter the **IP address** in the corresponding field and click **Update**.

Enabling/Disabling a DNS zone

You can enable or disable a zone whenever you choose to change its status:

1. When the zone is enabled, press the **Zone is enabled** button in the **Tools** area. The zone will be disabled and the button will change to **Zone is disabled**.
2. When the zone is disabled, press the **Zone is disabled** button in the **Tools** area. The zone will be enabled and the button will change to **Zone is enabled**.

Transfer IP addresses

The **Transfer IPs** are DNS server IPs that are allowed to transfer (copy) the zone information from the server (master or slave for the zone). These IPs will be recorded in the named.conf file in the `acl` (Access Control Lists) clauses.

The Transfer IP addresses can be modified only for zones that have been added from the DNS Manager control panel.

To access the **Transfer management page**, click the **Transfer IP addresses** button. This is where you can find a set of details about the DNS Zone: **DNS Zone type** and **Last DNS Zone update**.

Specify the required IP addresses in the available text boxes. To add more slave IP addresses, click the + button.

Pay particular attention to the **Last DNS Zone** update. This is the time when the Zone was actually updated by the DNS Manager low-level program.

For more information about this subject check [Transfer IP Addresses](#).

Managing Round Robin polls

The **DNS Round Robin** button is available only for forward zones added from the DNS Manager control panel.

If you are editing a Forward Zone and if the client is allowed Round Robin management, the **DNS Round Robin** button will be available in the **Tools** area. If the Forward Zone is not allowed Round Robin management, the icon will be grayed out. Press this button to open the **Round Robin polls management** page. This page lists all the polls that have been set up for the DNS Zone, including the following details:

- **S:** Indicates the poll's state. Press the icon in this column to switch between the active and inactive state.
- **Name:** Indicates the poll's name. Click on it to edit the poll.
- **Monitored Records:** Indicates the number of monitored records.
- **Active Records:** Indicates how many of the monitored records are active.
- **Last update:** Indicates the date and time of the most recent update.

The last table column contains a checkbox that allows you to select one or multiple polls in the list in case you wish to delete them.

If you wish to add a new poll, click the **Add new poll** button in the **New Round Robin poll** area. In the new page that opens, fill in the following information:

- **Name:** Enter the poll's name
- **Tested protocol:** Select the protocol you wish to test. The protocols available are HTTP, IMAP, MySQL, PING, POP3, SIP and SMTP.
- **Monitoring interval:** Enter the number of minutes between two subsequent tests.
- **Tested resource:** Enter a resource pertaining to the protocol that is to be tested. You can type a particular IP address or hostname, or you can monitor the value set for the selected records. For the later, use the \$RR variable.

\$RR is replaced by one of the entries in the Value column listed for the selected records. You can use expressions such as `http://$RR` or `http://$RR/test`.

- **Try resource for X seconds:** Enter for how long Round Robin will attempt to access the resource before failing.

Then, select the DNS records you wish to add to the poll from the table below. Click the **Apply changes** button to associate the selected records with the new poll. When you are done, press **OK** to save your settings and return to the previous page or **Cancel** to return to the previous page without applying your settings.

Setting SOA parameters

The SOA (Start of Authority) Record defines global parameters for the DNS Zone. There is only one SOA Record allowed in a DNS Zone file. The default SOA parameters values for all the DNS Zones that belong to the client account can be modified.

The administrator can edit the following options:

- **Serial:** The DNS Zone serial number that must be a natural value between 1 and 4294967295 (a 32 bit unsigned number). The value must increment when any resource record in the zone file is updated. A slave (secondary) DNS server will read the master's DNS SOA record periodically, either when refresh expires or when it receives a NOTIFY and will arithmetically compare the value of the serial number it currently stores with the one received from the master (primary) DNS. If the master's serial value is arithmetically higher than the one currently stored by the slave, then a zone transfer is initiated. If the value is the same or lower, then the zone transfer is not initiated and the slave DNS will not update.

Serial example: 1271668821

This value represents the current date and time (2010-04-19 12:20:21) using the UNIX time stamp.

- **The serial is generated automatically** - Select this checkbox if you want the serial number to be automatically generated. Depending on if you enabled this option or not, the serial can behave in three ways:
 1. If the checkbox is selected, then the serial number will be automatically generated.
 2. If the checkbox is selected and the serial number is manually modified, then DNS Manager will use for the first time the modified serial and, after this, it will automatically generate new serial numbers.
 3. If the checkbox is not selected, then the serial will not be automatically generated and the value entered in the Serial text box will be used. This method will force the serial to a certain value and the slave DNS server will never update the zone.
- **Refresh time:** 32 bit time value in seconds. This is the period of time that the secondary name server should wait before checking with the primary server to see whether the data has been modified. Default value: 10800 seconds.

RFC 1912 recommends 1200 to 43200 seconds, if your data is volatile or 43200 (12 hours) if it is not.

- **Retry time:** Signed 32 bit value in seconds. When a secondary name server requests for a Zone refresh from the primary server and this fails to respond, the secondary name server waits for the refresh time before attempting another Zone refresh after the failed attempt. Default value: 3600 seconds.
- **Expire time:** Signed 32 bit value in seconds. This setting indicates when the Zone is no longer authoritative and new interrogation of the root servers is required. It applies to Slaves only. Default value: 604800 seconds.

RFC 1912 recommends 1209600 to 2419200 seconds (2–4 weeks).

- **Minimum TTL:** This value is used as the default TTL for new Records created within the Zone. It is also used by other DNS servers to cache negative responses (for example when a Record does not exist). Default value: 86400 seconds.
- **Default TTL:** Signed 32 bit value in seconds. This is the amount of time that Zone Records are kept in a remote host cache. It is recommended that this value be set large. A small value will force remote servers to query the DNS server again for unchanged data. Default value: 604800 seconds.

Checking the nameservers

You can verify the availability of the name servers for a zone by clicking the **Check Name servers** button in the **Tools** area of the zone's management page. The page will be updated with a new area entitled **Check Name Servers** which lists all the name servers and displays their availability using the following indicators:

- **Not available:** The name server is unavailable.
- **Timed out:** The name server did not answer in due time.
- **Available:** The name server is available.
- **Unknown:** The name server could not be found.

Changing the owner of one or several DNS Zones

In order to change the owner of DNS Zones, follow the steps below:

1. Select the checkboxes corresponding to the DNS zone(s).
2. Click the [Change owner](#) link at the top of the table of DNS zones. This will open a page listing the clients.
3. Select the client who will be the new owner of the DNS zone(s).

When a zone is moved from one client to another, the ownership of the zone passed to the control panel.