Working with DNS Groups

DNS Groups

The **DNS** tab **Groups List** allows you to create, view, and manage groups of DNS Servers and Zones. Using groups, you can configure and push selected combinations of zones at one time.

DNS Groups List Interface

1) Add Group Button: Opens a dialog for creating a DNS Group

2) Resources Awaiting Approval Module - Group Level: Lists pending DNS Group level Approval events either submitted by, or able to be approved/rejected by, the current user.

3) Group Container: The Group container header shows the group name. Expand or close the group container by clicking on the expansion arrow (>) on the far right of the header. Clicking on the X will delete the Group and all zones included in the group. Rename the group by clicking on the name, then typing the desired changes and clicking outside of the name.

Group Actions:

4) Add Zone Button: Opens a dialog for creating a DNS zone under that group.

5) Push Group Button: Pushes all zones in the group.

6) Schedule Push Button: Schedules a push of all zones in the group to the selected day and time. Requires the scheduler tab / cron tasks to be enabled.

7) Export Zones: Exports all zones in the group into a .zip file.

8) Perms (Admin): Provides a shortcut for Admin users to change the group/user permissions for the DNS Group.

9) Resources Awaiting Approval Module - Zone List Level: Lists pending DNS Zone List level Approval events either submitted by, or able to be approved/rejected by, the current user.

10) Zone List: Forward and reverse zones included in the Group.

11) Forward / Reverse Zones Tabs: Shows zone list containing only forward or reverse zones, respectively.

12) Zone Name (Sortable): The name of the zone. Clicking on the zone name will open the zone details window, showing individual records. Clicking on the "Zone Name" header will sort the zone list by ascending or descending by name.

13) Last Pushed: The date and time the zone was last pushed.

14) Last Modified (Sortable). The date and time the zone was last modified. Clicking on the "Last Modified" header will sort the zone list by most / least recent modification date.

15) Records: How many records are in the zone.

16) Zone Status: Will notify if the zone or server connection contains errors, after a check has been performed (by clicking on the "Check" button). Clicking on the "Contains Errors" message will provide additional details on the error.

17) Actions: The actions that may be performed on each zone:
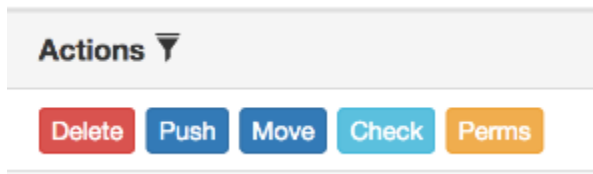
18) Delete: Deletes the zone from ProVision and removes the entry in ProVision conf file on the remote server(s) (the user will also receive a prompt to confirm they wish to complete the action)

19) Push: Pushes the zone to the associated server.

20) Move: Moves the zone to a different Group.

21) Check: Performs a check on the zone, notifying the user if errors or warnings are present for the zone.

22) Perms (Admin): Provides a shortcut for Admin users to change the group/user permissions for the zone.

23) Attached Servers: Sets the server that zone and group pushes will be sent to. Click on the header title or > to expand or collapse. Admins and users with server/group parent permissions may view, attach, or detach a server from the group.

24) Group Default Parameters: Click on the header title or > to expand or collapse. Edit default group settings including nameservers, SOA values, and Push Policy.

25) Applied ACLs: Click on the header title or > to expand or collapse. Add or detach ACLs to the group.

26) Catalog Zone Settings: Click on the header title or > to expand or collapse. Enable / Disable Catalog Zones. Enabling Catalog Zone exports all zones inside the Group into a new catalog zone, so that slave servers can receive zone changes.

27) Scheduled Tasks: If a scheduled push has been set up for the group, the task information will show in a "Scheduled Tasks" module. Click on the header title or > to expand or collapse. Review or delete scheduled group pushes.

Working with DNS Groups

DNS Groups allow for organizing multiple zones together and linking those zones with one or more servers. Default nameservers, SOA values, and ACL's are set at the Group level, so different Groups may have their own default values. Zones may be pushed individually, as a Group, or at the server level.

ProVision automatically designates a Default Group for zones to be imported or added to, as well as a "templates" group for holding pre-DNSv3 templates or to hold new zones created as templates. Creating additional Groups is completely optional.

Add a Group

DNSv3 automatically contains two Groups - one Default Group to contain existing or imported zones, and a Templates Group, containing zones mimicking DNS Templates. Additional Groups may be added or removed at any time, and zones may be freely moved or duplicated between different groups as needed.

To create a new Group, from the **DNS** Tab, select the **DNS Groups** sub menu. Then, click the "Add Group" button next to "DNS Groups List".
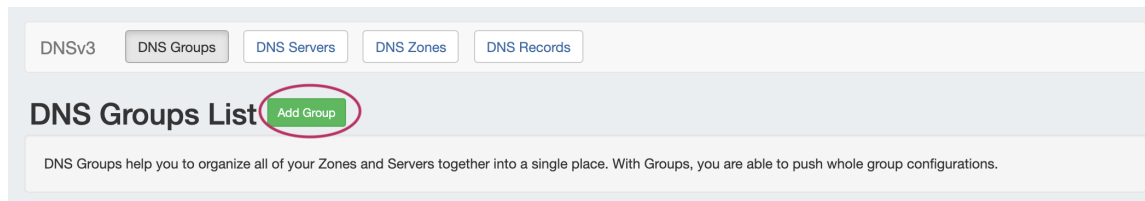
This will open the "Create New Group" dialog.

Create a Group

In the "Create New Group" dialog, enter the desired Group Name, select a parent resource, enter the default SOA values, and add a default Nameserver (type the NS, then click "Add").

Create New Group ✕

Group Name: aNewGroup

Parent Resource: TLR ▾

Default SOA Values

The values supplied here are the default SOA values used on all newly created zones.

SOA Host: ns.example.com.

SOA Mail: hostmaster.example.com.

Refresh: 172800

Retry: 900

Expire: 1209600

Minimum: 900

TTL: 1 hour ⇕

Default Nameservers

The name servers are automatically added to any new zone files created.

NameServer: ns1.example.com [Add]

Order	NS Record	
1	ns1.example.com.	✖

Close   **Save changes**

Click the "Save Changes" button when complete. The new group will be added to the DNS Groups List.

Navigating a Group

Open the Group container for the new Group by clicking on the expansion arrow at the top right corner of the header.

Information for Attached Servers, Group Default Parameters, Applied ACLs, and Catalog Zones settings may also be viewed and edited by clicking on the expansion arrows for each section.
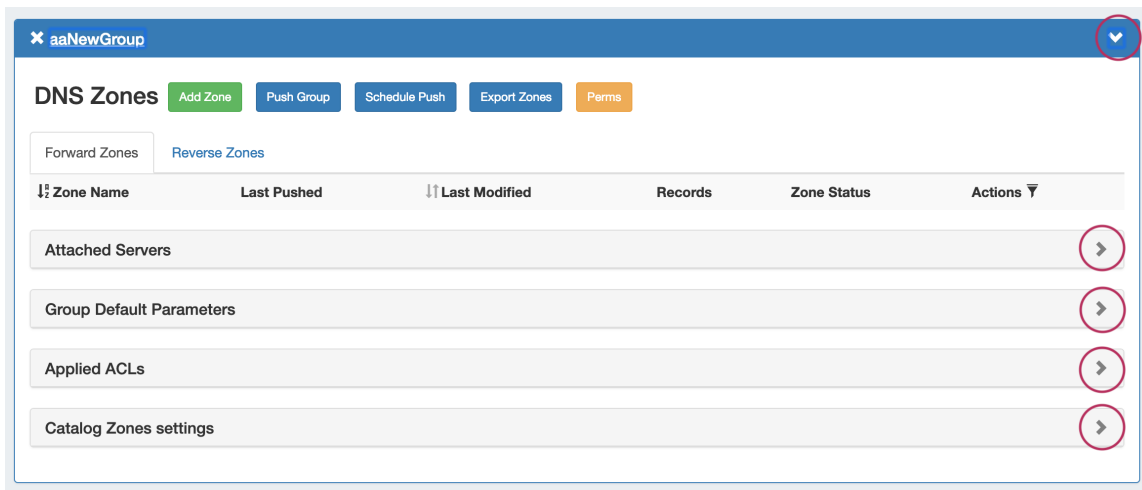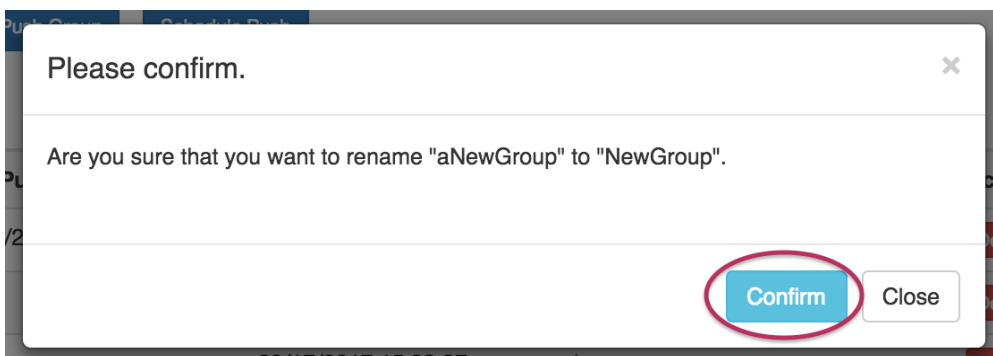
Edit a Group

Edit a Group Name

Edit the name for a Group by clicking inside the Group's Name. A highlight box will appear around the name, and a cursor inside the box.

Edit the text as desired using your mouse or arrow keys to navigate through the text. When complete, click anywhere outside of the name box, and a confirmation dialog will appear.

Click "Confirm" to save your changes, or "Close" to exit without saving.

Edit Attached Servers

Users may attach or detach servers from a group if they have either of the following permission types:

- TLR Admin permissions
- Full permissions on both the DNS Server(s) and the Parent Resource set for the DNS Group

If either condition is met, the user may view and attach/detach the applicable server(s) to a Group.

To attach a server, expand the "Attached Server" module, and click on the Attach Server list.

Select the desired server, then click "Attach".

The server is now attached to the group, and future zone and group pushes will be sent to the attached server.

From here, users have the option to Detach the server if desired, by clicking the "Detach" button.

Admin users may edit pemissions for the server using the "Perms" button, if desired (see: DNS Tab DNSv3 Permissions for additional information).

Edit a Group's Default Parameter Values

Under the desired Group, expand the "Group Default Parameters" module by clicking on the expansion arrow.

⚠️ **Save your changes!**

Important - to ensure that your changes are saved while working in Group Default Parameter, click the "Save Group Defaults" button under the Default SOA Values section - this save button will save any changes made to Advanced Settings, Default Nameservers, or Default SOA Settings.

Push Policy changes can be saved by clicking "Save Push Policy".

Edit Group Advanced Settings

Open the "Advanced Settings Inherited by the Zones" module by going to any DNS Group and opening the "Group Default Parameters".

The Advanced Settings module will be at the top of Default Parameters area. To expand it, click on the expansion arrow on the right side of the header bar.

Once expanded, settings may be entered for DNSSEC, Dynamic Updates, Master-Slave Handling, Lists, and free lines.

⚠️ **Save your changes!**

Important - to ensure that your changes are saved, click the "Save Group Defaults" button under the Default SOA Values section - this save button will save any changes made to Advanced Settings, Default Nameservers, or Default SOA Settings.

Edit Nameservers

Default Nameservers are automatically added to any newly created zone files.

You may choose not to set a default nameserver, however, an empty Nameservers list can cause invalid zones.

Change a Nameserver by typing the new NS record into the Nameserver box, then click "Add".

Delete the previous Nameserver by clicking on the red "X" to the right of the NS Record.

Change the order of multiple Nameservers by left-clicking (holding the mouse button down) over the NS Record to move, dragging to its desired placement, then releasing the mouse button.

The NS record will drop into its new location, with the order updated.

⚠️ **Save your changes!**

Important - to ensure that your changes are saved, click the "Save Group Defaults" button under the Default SOA Values section - this save button will save any changes made to Advanced Settings, Default Nameservers, or Default SOA Settings.

Edit Push Policy

Edit the push policy by selecting the radio next to the desired push behavior ("Group Centric", "Zone Centric", or "Server Centric") and click "Save Push Policy".

Push Policy

The Push Policy determine what zones and modules will be handled on Push action.

⦿ Group Centric

Push all the zones in the group to the servers attached to the group.

◯ Zone Centric

Push all the zones in the group to all the servers attached to them including servers not attached to the group.

◯ Server Centric

Push all the servers in the group to all the zones attached to them including zones not attached to the group.

[Save Push Policy]

Edit SOA Values

To edit the Default SOA values, simply click inside the value to be changed and type or select your new value. Be sure to also verify the desired Parent Resource for the Group, as the resource selected determines the Group's permissions.

Default SOA Values

The values supplied here are the default SOA values used on all newly created zones.

Parent Resource:	TLR ▾
SOA Host:	ns.example.com.
SOA Mail:	hostmaster.example.com.
Refresh:	172800
Retry:	900
Expire:	1209600
Minimum:	900
TTL:	1 hour ⬍

[Save Group Defaults]

Save Changes

Save all Nameserver, Advanced Settings, and SOA value changes by clicking on the "Save Group Defaults" button at the bottom of the section.

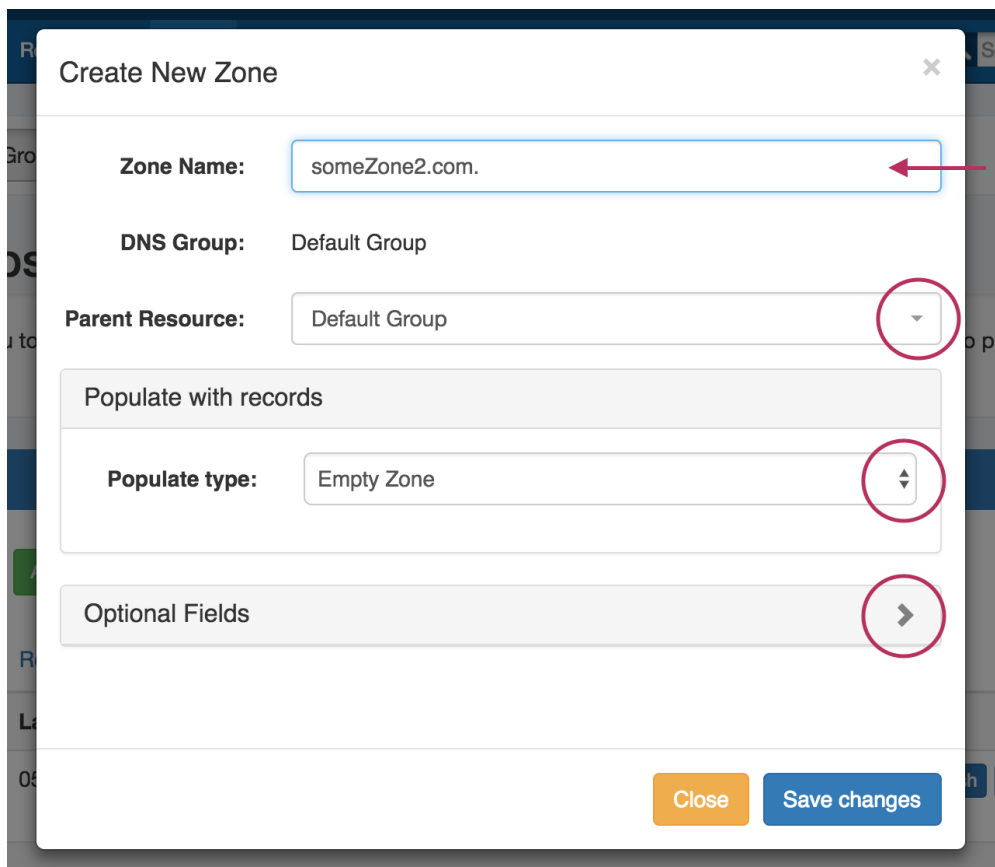Closing without saving will cause all changes to be lost.

Add Zones to a Group

To add a new zone to a Group, click the "Add Zone" button inside the desired Group.

Fill in the zone name, select a parent resource (by default, the Group is selected), select a populate type, and fill in any optional fields.

For more detail on each of these options, see Working with DNS Zones - Add a Zone.

When complete, hit the "Save Changes" button.

Pushing a Group

Before pushing a group for the first time, verify the settings in the following areas are correct:

- Under "Attached Servers", verify that the correct server is attached to the DNS Group.
- Under "Group Default Parameters" verify SOA Settings, Nameservers, and the Push Policy are set.

Manual Group Push

After verifying the attached server and group settings, manually push the Group by clicking the "Push Group" button under the desired Group.
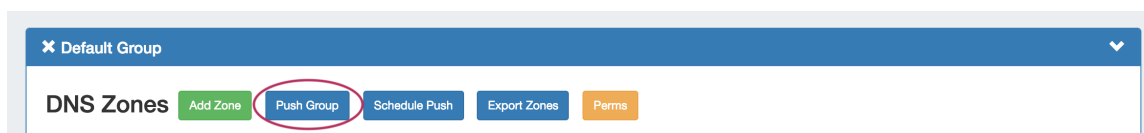
A DNS Push Status window appears, showing each zone in the Group as it is pushed to the attached server. If successful, a green "Finished DNS Pushing Request" will appear as the final message. If errors occur, an error message will show with details on the issue. When complete, hit the "Close" button.
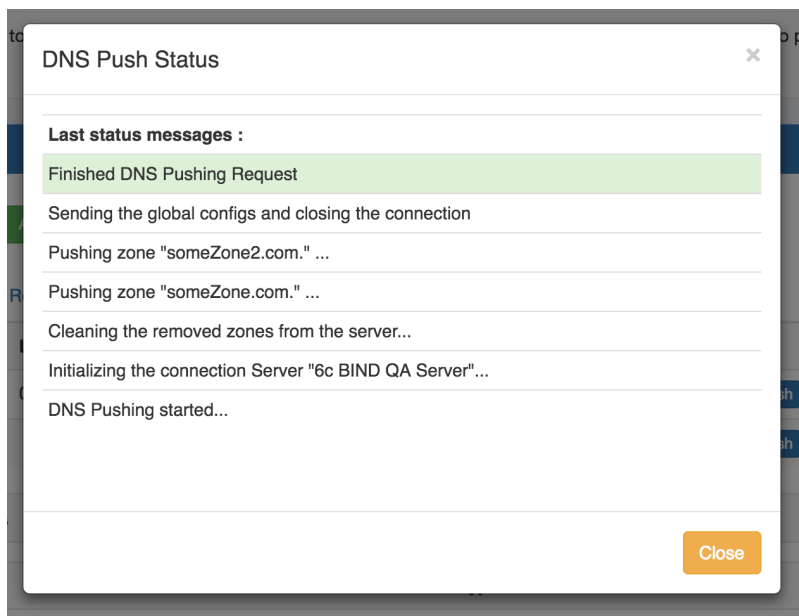
Scheduled Group Push

Scheduled pushes may be set up through the "Schedule Push" button for the Group.
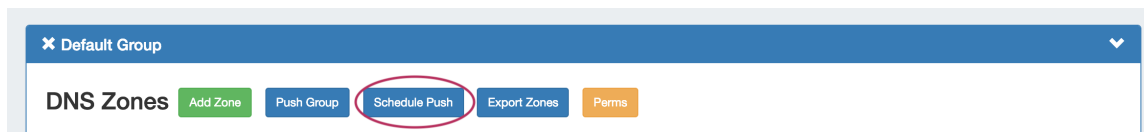
Click "Schedule Push" for the Group, then select a date, time (12 hour, with AM / PM toggle), add a notification email address, and click "Save changes".

Push Scheduler

Pick date and time (US/Pacific):

		February 2019				
Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	**20**	21	22	23
24	25	26	27	28	1	2
3	4	5	6	7	8	9

02 : 25 PM

Notification Email:

something@example.com

Close   Save changes

The Scheduled task will be shown in both the Group details (under "Scheduled Tasks") and the Admin Scheduler task list.

Scheduled Tasks

| Task Name	Last Run	Repeat Time	Actions
Scheduled Push: Default Group		One time on 2017-05-31 at 14:00 PDT	Delete

The task may be deleted prior to running by clicking the "delete" button, but will automatically be removed once completed.

Delete a Group

Delete a non-Default Group by clicking on the "X" to the left of the Group's name in the DNS Groups List.

✕ Group 2a   **›**
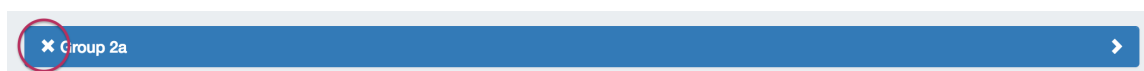
A confirmation message will appear, click "Confirm" to save your changes, or "Close" to exit without saving.
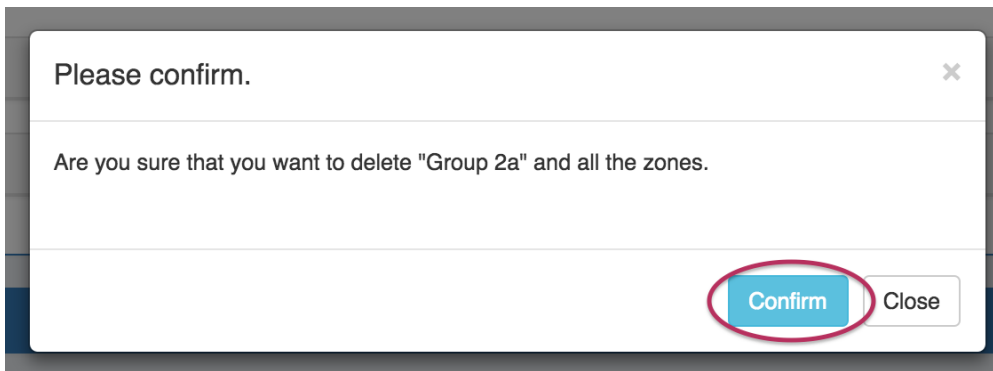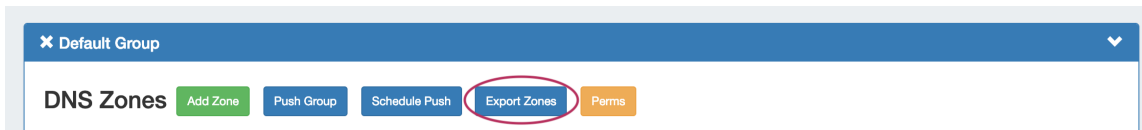
The Default Group may not be deleted.

Export a Group

All zones under a DNS Group may be exported to a .zip file by clicking the "Export Zones" button at the top of the Group module.
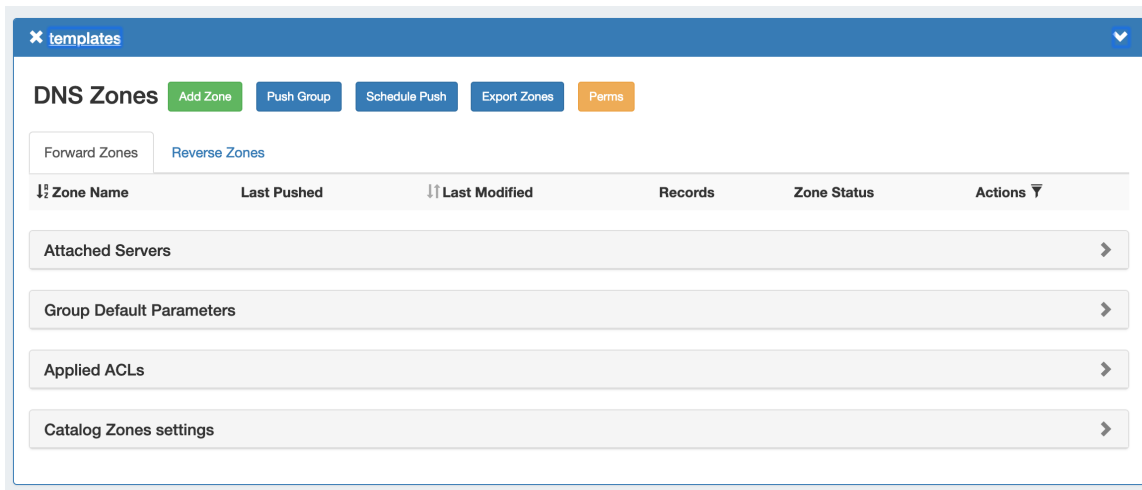
The exported .zip file may be used with ProVision's BIND DNS Zone Upload / Import tool.

Using the Templates Group / Cloning Zones to a Group

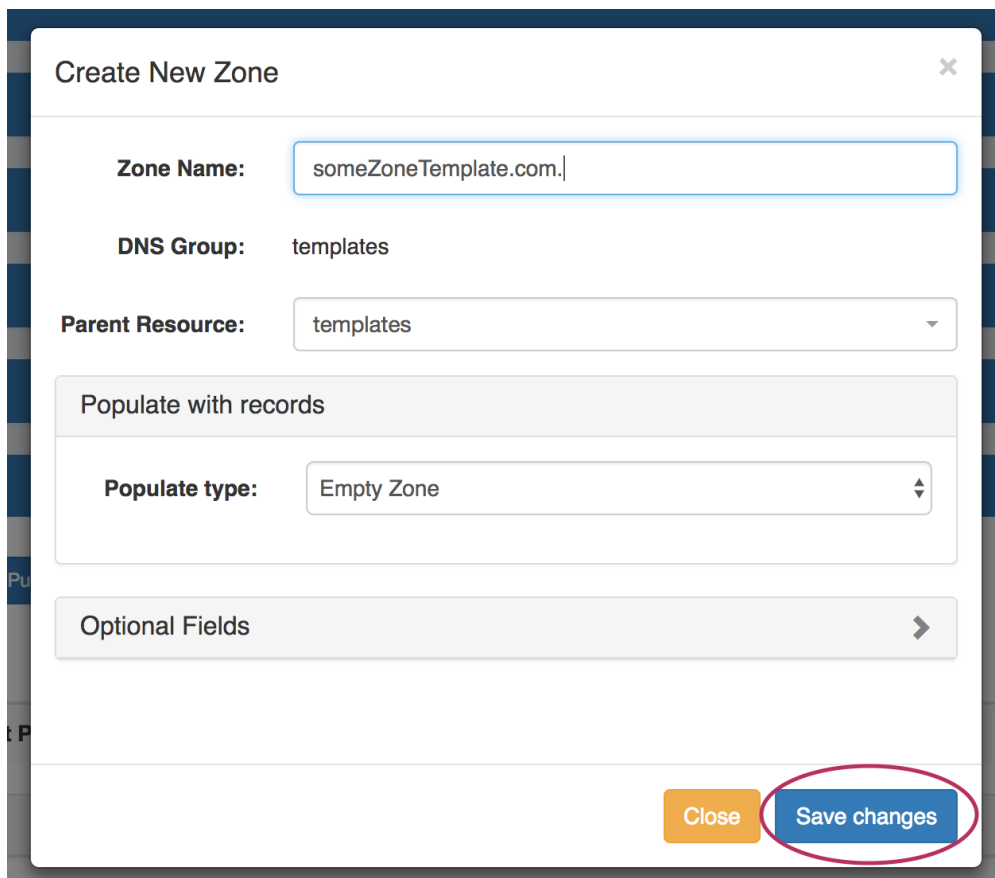By default, a "templates" group is included in DNSv3.

Any pre-DNSv3 DNS Templates will be included in this group, as well as any newly created zones to be used as template zones.

The template group functions the same as any other DNS Group, but gives a holding place for zones designed as templates separate from other zones.

Create your template zone

Add a template zone by clicking the "Add Zone" button, giving the zone a descriptive name to clearly identify as a template, select the populate type, and fill in any optional data. (see Working with DNS Zones - Add a Zone.)

Once the zone has been created, it will show in the templates group zone list, and is now selectable as a base for the "clone existing zone" option when creating a new zone.

Clone Template to a Different Group

Go to a different group, and click "Add Zone". Enter in the new zone name and parent.

Under "Populate Type", select "Clone existing zone" and select /search for the template zone you created.

Edit the optional fields as needed, and click "Save changes".

Additional Information

For more information on DNSv3 tasks, see:

- Working with DNS Zones
- DNS Zones Overview
- DNS Administration
- Working with DNS Servers
- Approvals