

Working with DNS Zones - Common Tasks

Working with DNS Zones

DNSv3	DNS Groups	DNS Servers	DNS Zones	DNS Records	Add Zone
DNS Zone list 25					
Forward Zones Reverse Zones Catalog Zones					
Zone Name	Last Pushed	Last Modified	Records	Zone Status	Actions
192.88.64.in-addr.arpa. (Default Group)	01/08/2024 13:57:29	01/04/2024 10:27:38	15		Delete Push Check Perms
193.88.64.in-addr.arpa. (Default Group)	01/08/2024 13:57:29	07/19/2017 20:12:12	28		Delete Push Check Perms
194.88.64.in-addr.arpa. (Default Group)	01/08/2024 13:57:29	07/19/2017 20:12:13	28		Delete Push Check Perms
195.88.64.in-addr.arpa. (Default Group)	01/08/2024 13:57:29	07/19/2017 20:12:14	26		Delete Push Check Perms
196.88.64.in-addr.arpa. (Default Group)	01/08/2024 13:57:29	07/19/2017 20:12:14	6		Delete Push Check Perms
197.88.64.in-addr.arpa. (Default Group)	01/08/2024 13:57:29	07/19/2017 20:12:15	22		Delete Push Check Perms

This page details some common DNS tasks performed from the [DNS](#) Tab.

DNS Zones are accessed under the [DNS](#) Tab, [DNS Groups](#) or [DNS Zones](#) sub-tabs. Separate zone lists exist under each DNS group.

DNS Records are accessed from either the View Zone page (for records under that zone), or globally under the [DNS Records](#) sub-tab. For Details on working with records in either area, see [Working with DNS Records](#)

For a more general overview DNS Groups and Editing Zones, see [Working with DNS Groups](#) and [DNS Zones Overview](#). This page focuses on specific DNS zone tasks.

DNSv3 Zone Directory

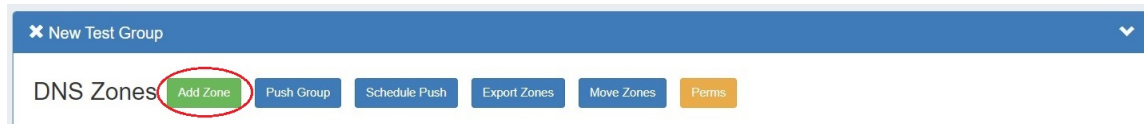
In DNSv3, zone files in the server directory will have a number appended, similar to 'example.com._123.zone'. This number is the Resource ID associated with the zone, and is used to identify the zone and differentiate zones that may have the same name, but under different DNS Groups. This append does not affect any zone functionality otherwise.

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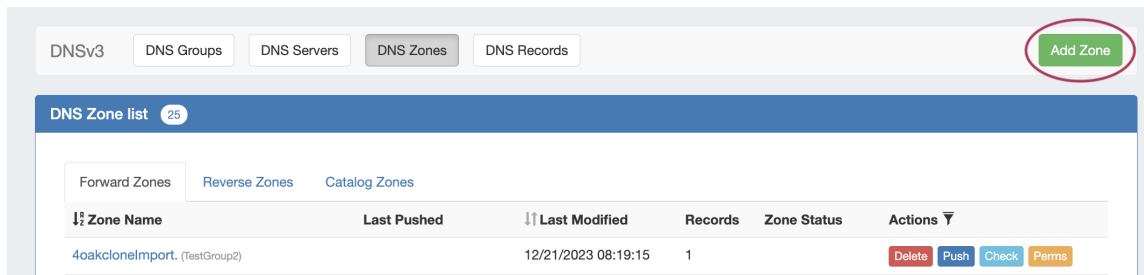
Working with DNS Zones

Add a Zone

Add a new zone while in the DNS Groups tab by selecting "Add Zone" under the desired group.



You may also add new zones from the DNS Zones tab, by clicking "Add Zone" at the top of the page.



The "Create New Zone" dialog will pop up.

A screenshot of a 'Create New Zone' dialog box. It has a title bar with a close button. The form contains several fields: 'Zone Name' with a placeholder 'ex: example.com.', 'DNS Group' set to 'templates', and 'Parent Resource' set to 'templates'. Below these is a section titled 'Populate with records' containing a 'Populate type' dropdown menu set to 'Empty Zone'. At the bottom, there's an 'Optional Fields' section with a right-pointing arrow. At the very bottom of the dialog are two buttons: 'Close' and 'Save changes'.

DNS

Enter the name of your new zone and select a parent resource, if desired. The DNS group will already be selected.

DNSv3 allows you to populate the zone with three options:

- Empty Zone - create the zone as an empty zone, and manually create records

- Populate by AXFR Transfer - transfer zones from an outside server
- Clone an existing zone - use an existing zone as a template, and manually edit as needed

From there, you may either save your changes and complete zone creation, or add in optional field details.

Optional Fields

Expand the "Optional Fields" section by clicking on the chevron (>) or the "Optional Fields" header.

Optional Fields
>

Zone Type:

Zone Host:

ex: hostmaster.example.com.

Zone Email:

ex: mail.example.com.

Zone Serial:

ex: 2003080800

Zone Refresh:

ex: 172800

Zone Retry:

ex: 900

Zone Expiry:

ex: 1209600

Zone Minimum:

ex: 86400

Zone TTL:

1 hour

Under this section, add in optional values for Zone Type, Host, Email, Serial , Refresh, Retry, Expiry, or TTL.

When finished, click "Save Changes".

To exit without saving, simply click "Close".

Autogenerate Reverse Zone

Autogenerate a reverse zone from an IP Block by clicking on the CIDR link in the IPAM Gadget block list.

IP Address	Size	Owner	Created	Updated	Netmask
144.121.216.132/30	30	Customer	2018-07-16	-	NET-144-...
144.121.228.1	reverse zone: 144.121.216.132/30				
144.121.228.128/29	29	Customer	2018-10-04	-	NET-144-...

The reverse zone will be created for the block, and the Zone View page will load, displaying further information.

DNSv3

DNS Groups

DNS Servers

DNS Zones

DNS Records

216.121.144.in-addr.arpa.

Test Group 2

Push Zone Now

Schedule Push

Export Zone

Import Zone

Edit the comment.

Advanced Settings

DNS Records

Add a New

A

Record

Add

Record Type	Record Data Q	Actions
SOA	ns.example.com. hostmaster.example.com. (2022081801 172801 900 3600 86400)	
NS	216.121.144.in-addr.arpa. maps to test.	Delete Check Perms
PTR	{132-135}.216.121.144.in-addr.arpa. maps to \$1.216.121.144.test.test.com.	Delete Check Perms

Attached Servers

Edit a Zone (View Zone page)

Zones may be editing by clicking on the zone name in any zone list in which it appears - the DNS Zones Zone List, DNS Groups Zone List, or zones listed as attached to a server under DNS Servers.

Clicking on the zone name from any zone list opens up the View Zone page.

example.com.

Example Group

Push Zone Now

Schedule Push

Export Zone

Import Zone

Edit the comment.

Advanced Settings

DNS Records

Add a New

NS

Record

Add

Record Type	Record Data Q	Actions
SOA	host.example.com. hostmaster.example.com. (2023041000 172800 900 3600 86400)	
NS	host.example.com. maps to ns1.example.com.	Delete Check Perms

Attached Servers

Server Name	Server Backend	Server Type	Server Status	Actions
Servers inherited from "Example Group"				
BIND DNS QA Server	ISCBIND	master		Push Perms

Attach server :

Select Server

Use Default Type (Recommended)

Attach

Zone Backups and Attached Files

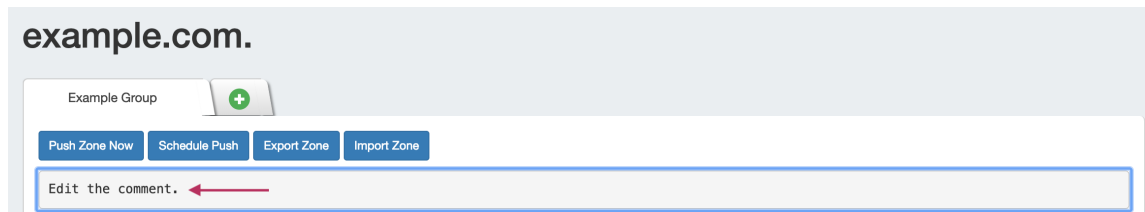
Show current zone export

Here, comments may be added, records added or updated, servers attached to the zone, advanced settings edited, backups restored or the zone pushed / exported. For a general interface overview of the View Zone page, see [DNS Zones Overview](#).

For detailed information on working with DNS Records from the View Zone page Record List or the DNS Records sub-tab, see [Working with DNS Records](#).

Add a comment

To add a comment to a zone, click anywhere inside the comment area and begin typing. The comment will be saved when an area outside of the comment box is clicked, deselecting the comment area.



example.com.

Example Group +

Push Zone Now Schedule Push Export Zone Import Zone

Edit the comment. ←

Edit Advanced Settings

Open the zone "Advanced Settings" section by clicking on the header or the expansion arrow (>).

Under this area, you can change settings such as Parent Resource, DNSSEC, Lists, Zone permissions, and free lines.

Advanced Settings

Parent Resource:

Example Group

The new zone resource will be a child of the Parent Resource.

Enable DNSSEC:

OFF

Enable Dynamic Updates:

OFF

This feature is using the dynamic update functionality of the DNS Server. Every record that you modify/remove/create will be updated on the servers automatically without pushing the zone if the queue is not enabled.

Disable Master-Slave handling:

OFF

By default ProVision handles the master and slave specific options in the zone automatically. By enabling this option ProVision will not add specific configuration options to the zone depending on the server configuration.

Disable Zone Export:

OFF

If set to ON the Zone File will not be created on push.

Disable Zone Monitor:

OFF

If set to ON the DNS Monitor functionality will be disabled for this zone.

Forwarders List:

ex. 192.168.3.0; 192.168.3.1

The list will be added to the forwarders list for forward type zones.

Also-Notify List:

ex. 192.168.3.0; 10.10.3.0/24

The list will be added to the also-notify list on the DNS servers that support this option.

Allow Update List:

ex. 192.168.3.0; 10.10.3.0/24

The list will be added to the allow-update list on the DNS servers that support this option.

Allow Transfer List:

ex. 192.168.3.0;

The list will be added to the allow-transfer list on the DNS servers that support this option. On exporting a zone to a master server, the slaves are automatically added !

Allow Notify List:

ex. 10.1.0.15; 172.28.32.7;

The list will be added to the allow-notify list on the DNS servers that support this option. On exporting a zone to a slave server, the masters are automatically added !

Allow Query List:

ex. 192.168.1.1; 192.168.1.2; 10.10.3.0/24

The list will be added to the allow-query list on the DNS servers that support this option.

Zone Permissions :

Set Permissions

The Zone Permissions can be set by "Set Permissions" button above. This will affect which user groups can view and edit the zone.

Free Lines (Dangerous):

The content inside this field will be append to the zone section of the server configuration. Please be very careful with this field as it can cause configuration errors ! They are currently valid only for ISC Bind.

Server Specific Free Lines (Dangerous):

BIND DNS QA Server

Add new

Save

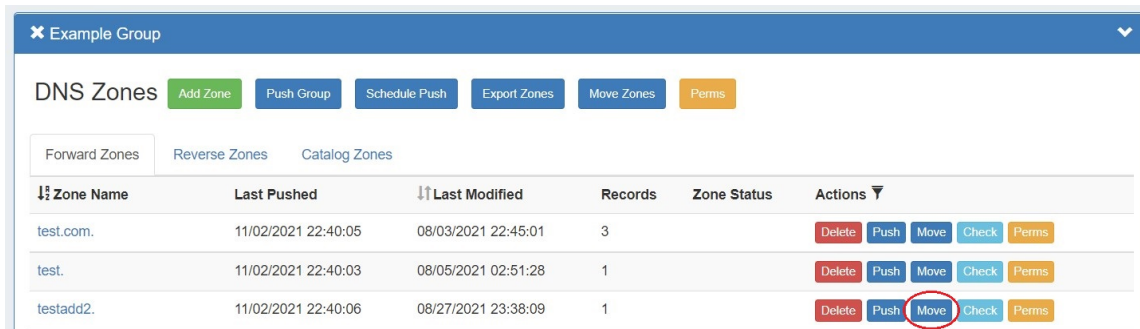
Edit fields as needed, and click "Save" when done.

Move Zones to a Different Group

Zones may be moved to a different group than the one created under, either individually or as a group.

Single Zone Move

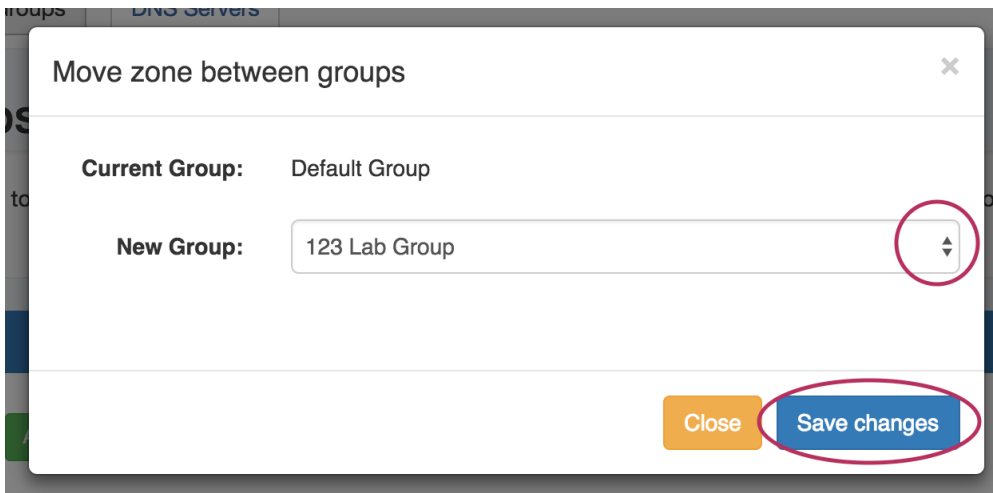
To move a single zone, navigate to the DNS group the zone is under, then click the "Move" button in the Actions column for the zone.



The screenshot shows the 'Example Group' interface with a 'DNS Zones' tab. Below the tab are buttons for 'Add Zone', 'Push Group', 'Schedule Push', 'Export Zones', 'Move Zones', and 'Perms'. The 'Move Zones' button is circled in red. Below these buttons is a table with columns: Zone Name, Last Pushed, Last Modified, Records, Zone Status, and Actions. The table contains three rows of zone data. The 'Move' button in the Actions column for the 'test.' zone is circled in red.

Zone Name	Last Pushed	Last Modified	Records	Zone Status	Actions
test.com.	11/02/2021 22:40:05	08/03/2021 22:45:01	3		Delete Push Move Check Perms
test.	11/02/2021 22:40:03	08/05/2021 02:51:28	1		Delete Push Move Check Perms
testadd2.	11/02/2021 22:40:06	08/27/2021 23:38:09	1		Delete Push Move Check Perms

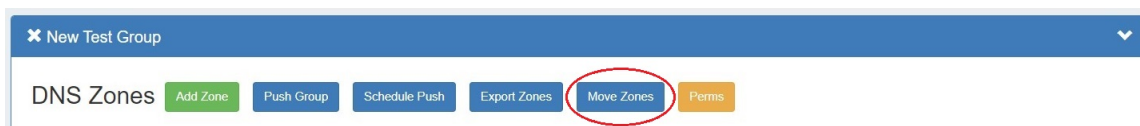
The "Move Zone" modal will appear - select the new group to move to the zone under, and click "Save Changes" to complete.



The screenshot shows the 'Move zone between groups' modal. It has a 'Current Group' field set to 'Default Group' and a 'New Group' dropdown menu set to '123 Lab Group'. The dropdown menu is circled in red. At the bottom right, there are two buttons: 'Close' and 'Save changes'. The 'Save changes' button is circled in red.

Bulk Zone Move

You may move all the zones in a group to another group by selecting "Move Zones" under the desired group.



The screenshot shows the 'New Test Group' interface with a 'DNS Zones' tab. Below the tab are buttons for 'Add Zone', 'Push Group', 'Schedule Push', 'Export Zones', 'Move Zones', and 'Perms'. The 'Move Zones' button is circled in red.

Pushing Zones

Zones may be pushed individually ("Push Zone Now"), as a scheduled future push ("Schedule Push"), or pushed as part of a group or server push.

Push Now (from Group List)

To immediately push a single zone, navigate to the DNS group the zone is under, then click the "Push" button in the Actions column for the zone.

You may also look for the zone in the DNS Zones tab Zone List, and then likewise, click the "Push" button in the zone row.

Example Group

DNS Zones

Add Zone

Push Group

Schedule Push

Export Zones

Move Zones

Perms

Forward Zones

Reverse Zones

Catalog Zones

Zone Name	Last Pushed	Last Modified	Records	Zone Status	Actions
test.com.	11/02/2021 22:40:05	08/03/2021 22:45:01	3		Delete Push Move Check Perms
test.	11/02/2021 22:40:03	08/05/2021 02:51:28	1		Delete Push Move Check Perms
testadd2.	11/02/2021 22:40:06	08/27/2021 23:38:09	1		Delete Push Move Check Perms

Users can customize a push by choosing an option from the push options modal and clicking "Execute Push". To push normally, click "Execute Push" without selecting any options.

DNS Push Options

☐ Push Modified Zones Only

Push only the zones that have been modified since the last push.

☐ Push to Masters Only

If this option is checked, the Push request will be executed only to Master Servers.

☐ Push Config Only

Push only zone config declarations. WARNING If you have zones that have never been pushed, you may end up with a config declaration and a missing zone file.

Execute Push

Close

The "Push Status" modal will appear, showing status and any errors that occur. When a successful zone push is complete, a green "Finished DNS Pushing Request" message will appear, and the window may be closed.

DNS Push Status

Last status messages :

Finished DNS Pushing Request

Sending the global configs and closing the connection

Pushing zone "someZone.com." Server "6c BIND QA Server"...

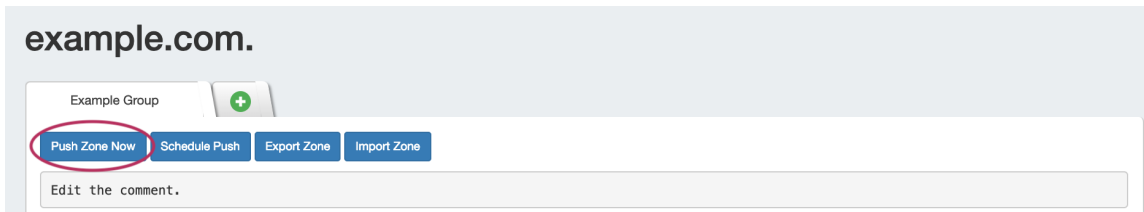
Initializing the connection Server "6c BIND QA Server"...

DNS Pushing started...

Close

Push Now (from View Zone page)

The View Zone page, accessed from clicking on the zone name in the group zone list, includes a "Push Zone Now" button that immediately attempts to push the zone to the attached server(s).

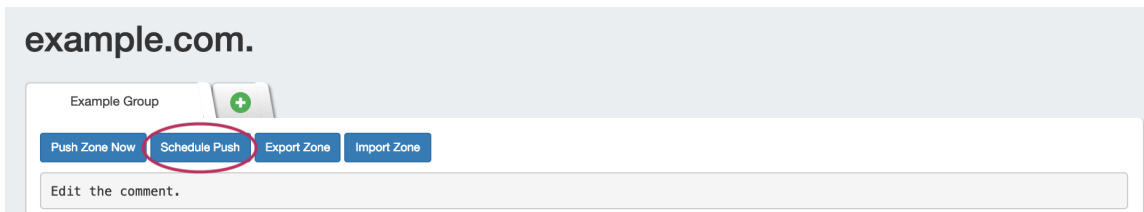


Click on "Push Zone Now", optionally select a customization, and click "Execute Push". The "Push Status" modal will appear, showing status and any errors that occur.

When a successful zone push is complete, a green "Finished DNS Pushing Request" message will appear, and the window may be closed.

Schedule Push (from View Zone page)

The View Zone page includes an option to schedule a zone push, similar to scheduling a group push.



Click "Schedule Push" for the zone, then select a date, time (24 hour), add a notification email address, and click "Save changes".

Push Scheduler

Pick date and time (UTC):

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January 2022

>

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28

29

30

31

1

2

3

4

5

Time

19:28

19:29

19:30

19:31

19:32

19:33

19:34

Notification Email:

something@example.com

Close

Save changes

The scheduled task will be shown in both the Zone View page (under "Scheduled Tasks") and the [Admin Scheduler](#) task list.

Scheduled Tasks			
Task Name	Last Run	Repeat Time	Actions
Scheduled Push: someZone.com.		One time on 2017-06-02 at 11:05 PDT	Delete

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

Schedule Push (Admin Scheduler):

Scheduled zone and server pushes may also be set up by Admin users from the [Scheduler](#) tab. For more information, see the [Scheduler Tab](#) documentation.

Group Push:

All zones contained in a DNS group may be pushed at the same time, by pushing the DNS group.

For information on working with DNS groups, including performing a manual or scheduled group push, see [Working with DNS Groups](#) - Pushing a Group.

Server Push:

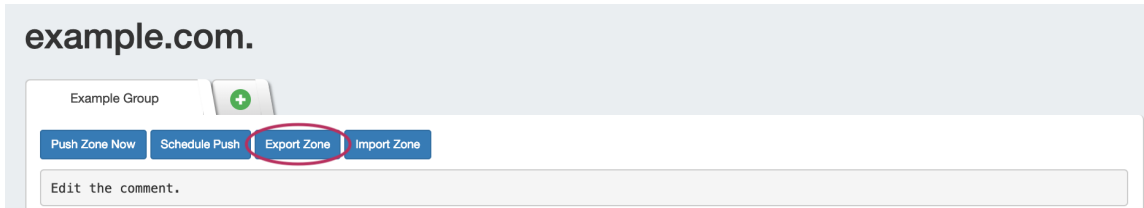
Admin users may push all zones on a server from the [DNS](#) Tab -> DNS Servers page.

For information on working with DNS servers, including performing a manual or scheduled server push, see [Working with DNS Servers - Pushing a Server](#).

Export a Zone

Individual zones may be exported to a .zone file by clicking the "Export Zone" button on the View Zone page.

Individual .zone files may later be compressed into a .zip, and used with the [BIND DNS Zone Upload / Import tool](#).



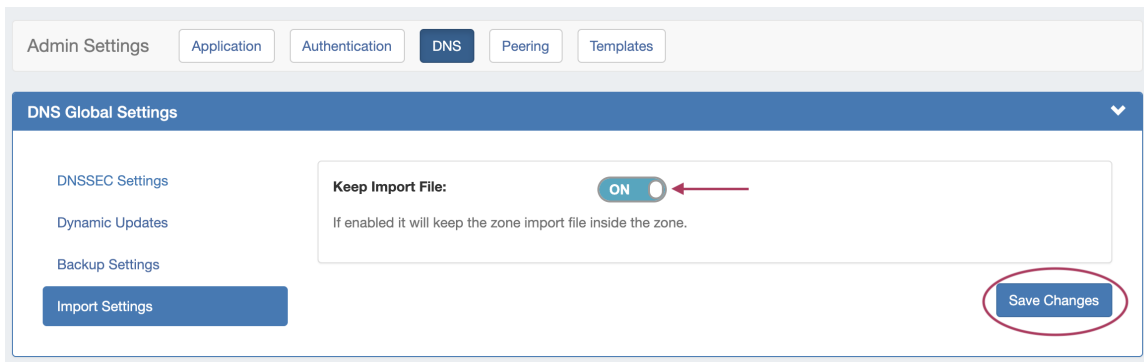
Import Zone / Import Records

A zone file (.zone) may be imported into a zone to populate record data. Note: To import the record data, the zone must already exist in ProVision - although it may be an empty placeholder zone if necessary.

Enable Saving Import Files (Admin Setting - Optional)

Before you import a zone file, you may (optionally) select to save the import file to the zone. Saving the file allows you to later re-download it directly from ProVision.

To enable saving import files, go to Admin Preferences DNS Settings sub-tab. From there, select "Import Settings" in the DNS Global Settings module.

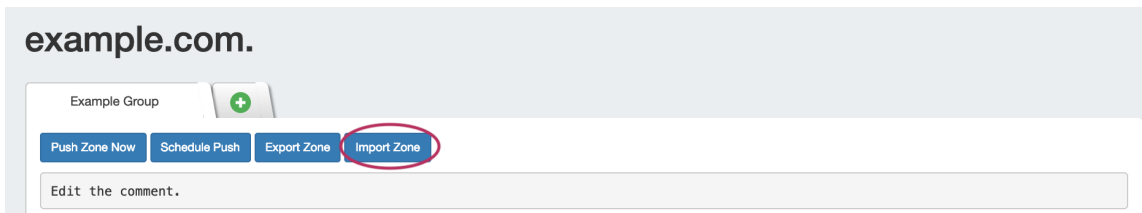


Toggle "Keep Import File" into the ON position, then select "Save Changes".

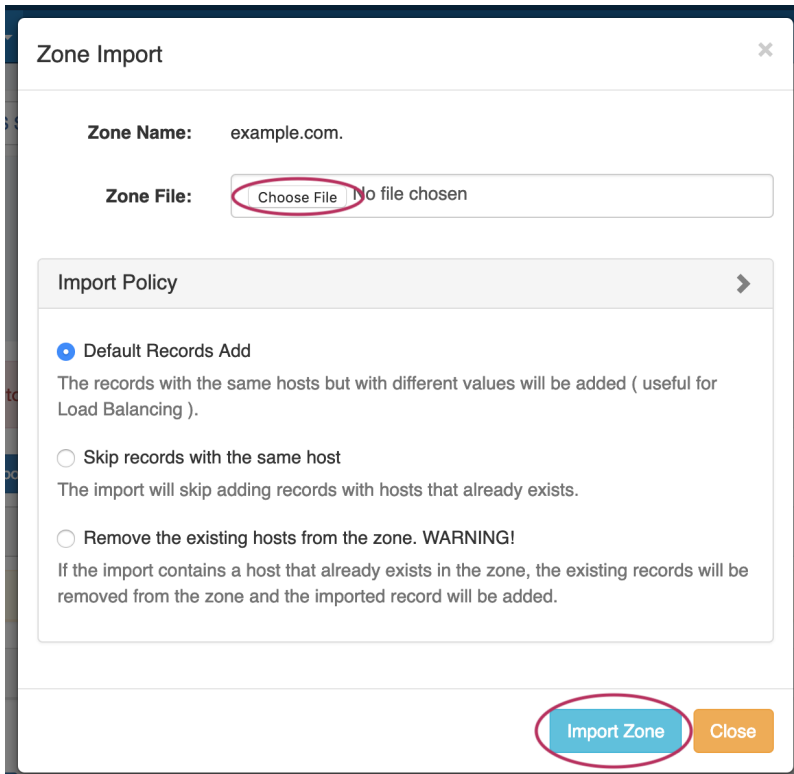
Import Zone File

To import a zone file to populate record data in ProVision, go to the View Zone page for the zone. The zone must already exist in ProVision, although it may be empty

Click "Import Zone" on the View Zone page.



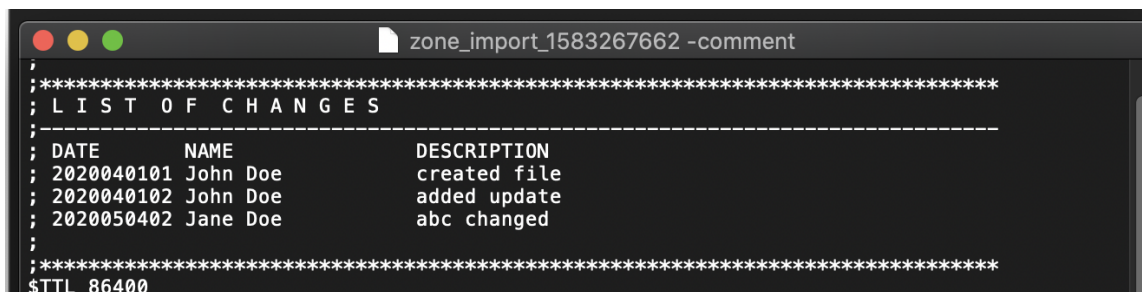
A Zone Import dialog box will open. Next to **Zone File:**, click "Choose File" and select your .zone file to import. Then, select an import policy to follow.



When done, click "Import Zone".

Importing Zone file with Comments

DNS Zone Import will also import comments contained in the .zone file, such as an internal change log (as seen in the image below).



During import, these comments are added to ProVision's zone comments field:

testadd.

Default Group

Some Group

+

Push Zone Now

Schedule Push

Export Zone

Import Zone

```
*****
; L I S T   O F   C H A N G E S
;-----
;  DATE      NAME      DESCRIPTION
; 2020040101 John Doe   created file
; 2020040102 John Doe   added update
; 2020050402 Jane Doe   abc changed
;
;*****
```

Advanced Settings >

Download Imported Zone File

If "Keep Import File" has been enabled, the original zone import file will display in the View Zone page under "Zone Backups and Attached Files".

Zone Backups and Attached Files

File Name	Date	Action
zone_import_1583267662	03/03/2020 14:34:22	Download

Backup Date

2020-03-03 11:35:54

To download the original file, click "Download" for the import file.

Check a Zone

Check a zone for errors by clicking the "Check" button under "Actions" for the desired zone.

Example Group

DNS Zones

Add Zone

Push Group

Schedule Push

Export Zones

Move Zones

Perms

Forward Zones

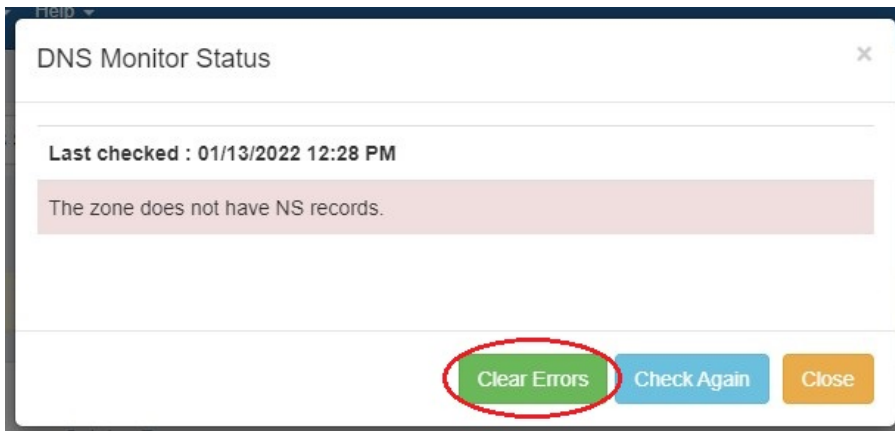
Reverse Zones

Catalog Zones

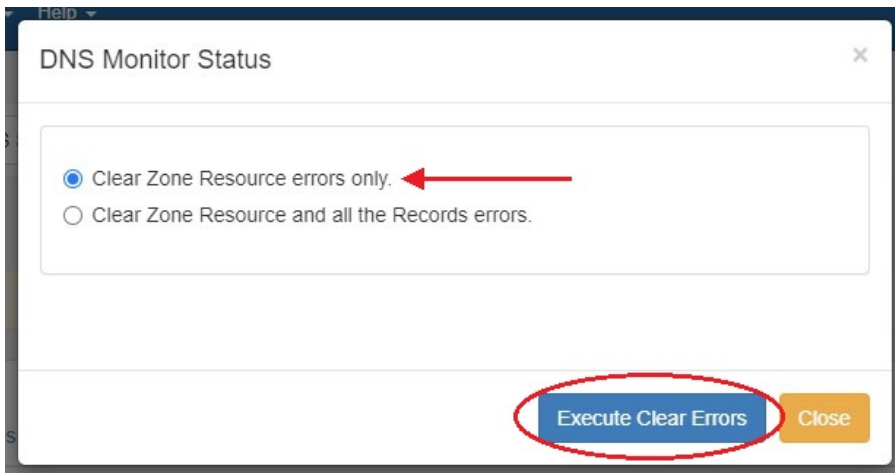
Zone Name	Last Pushed	Last Modified	Records	Zone Status	Actions
test.com.	11/02/2021 22:40:05	08/03/2021 22:45:01	3		Delete Push Move Check Perms
test.	11/02/2021 22:40:03	08/05/2021 02:51:28	1		Delete Push Move Check Perms
testadd2.	11/02/2021 22:40:06	08/27/2021 23:38:09	1		Delete Push Move Check Perms

A dialog box will appear, with details on any errors.

You may clear the error if desired, recheck, or close the box. Clicking the "Clear Errors" button allows you to choose whether to clear the zone error only or the zone error and any errors in records in the zone.

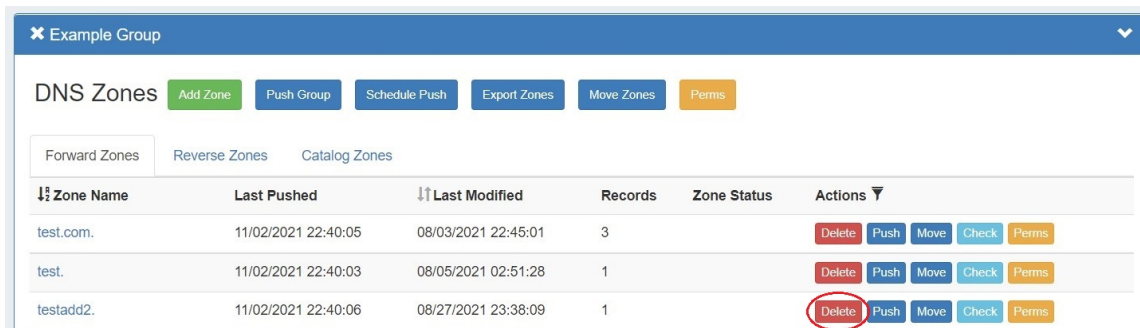


Choose an option and click "Execute Clear Errors".



Delete a Zone

Users with resource delete permissions over the zone may delete a zone record by clicking the "Delete" button under "Actions" for the desired zone entry in any Zone List.



Additional Information:

For more information on working with DNS Zones, Groups, and Servers, see the following sections:

- [DNS Tab](#)

- [Working with DNS Groups](#)
- [Working with DNS Records](#)
- [Editing DNS Zones \(The View Zone Page\)](#)
- [DNS Administration](#)
- [Import DNS Zones](#)
- [Approvals](#)