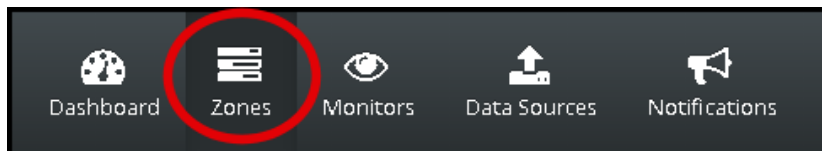


Secondary DNS Setup- Using NS1 Managed DNS as Primary & CloudfloorDNS as Secondary

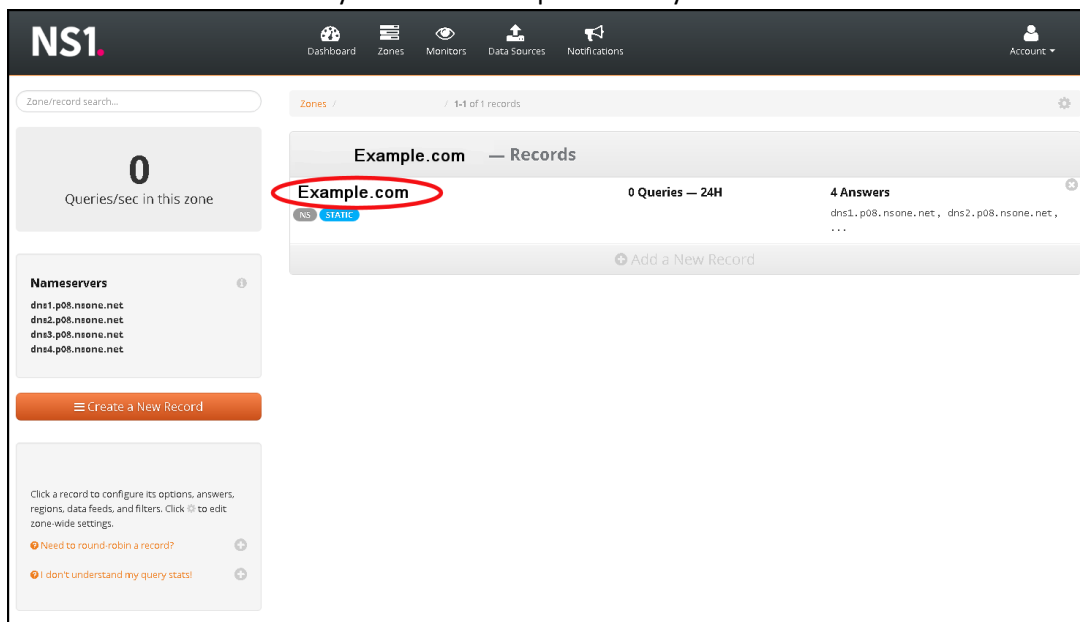
It's easy to add reliability to your DNS by using CloudfloorDNS as a backup or secondary DNS provider to your NS1 Managed DNS account. Follow this tech doc on how to enable Secondary DNS at NS1 and start using CloudfloorDNS as a backup DNS. This document shows you how to setup backup DNS for only one zone. You can repeat these steps to manage secondary for multiple zones.

Setup Permissions for Zone Transfers from NS1

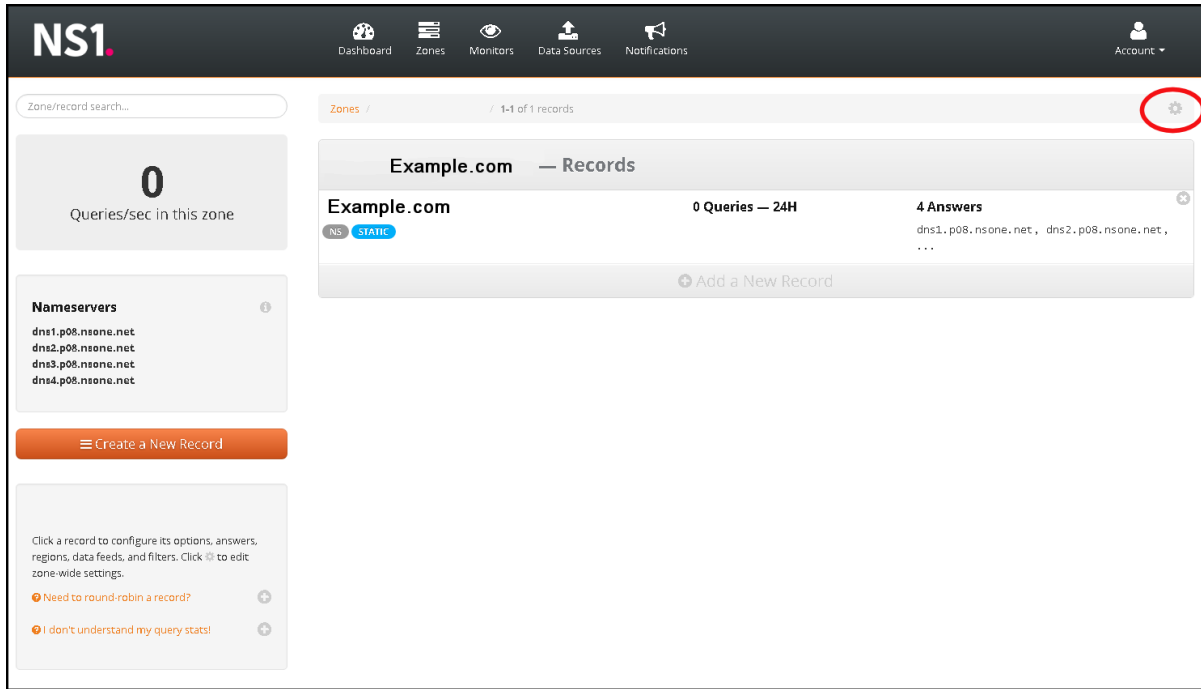
1. To enable Secondary DNS , Login to NS1 and click on Zones.



2. Click on the Domain Name you want to setup Secondary DNS on as shown below

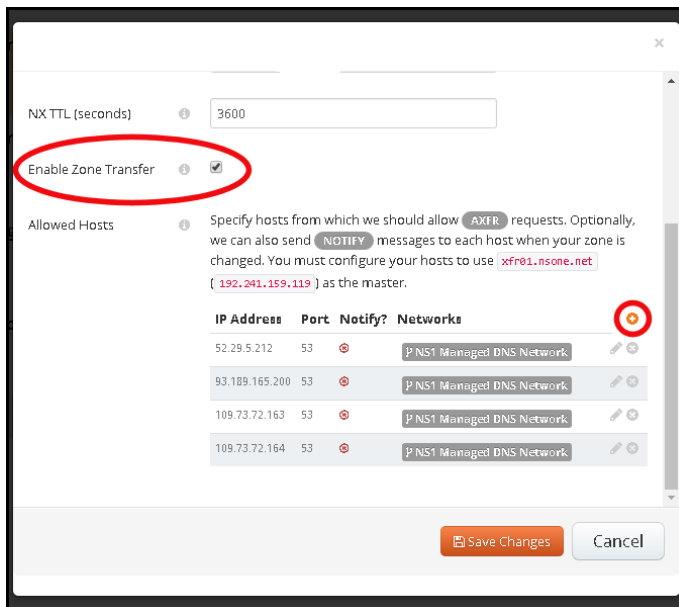


3. Select Zone Options in the upper right corner as shown circled.



4. You'll then see an option to Enable Secondary Zone Transfers (circled in red) and an option to add Server IP's that can perform AXFR Zone transfers. Click ENABLE ZONE TRANSFER as shown. You should then add in these four IP's from CloudfloorDNS. Once you add in the first one, you need to click the + sign that is circled below to add the other 3 IP's. The IP's are: **52.29.5.212** , **93.189.165.200** , **109.73.72.163** , **109.73.72.164**

Click Save Changes once you are done



CloudfloorDNS EU
Kingsbury House
6 Sheet Street
Windsor, UK SL4 1BG
UK - +44 (0)1481 720924

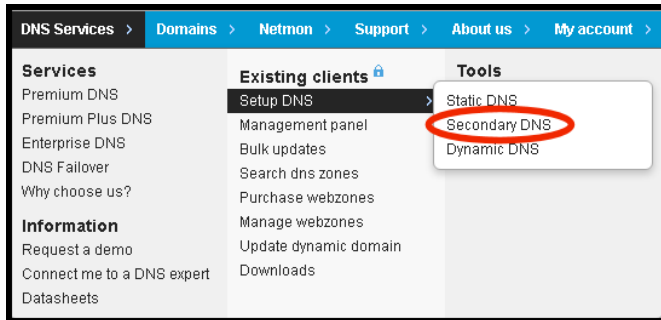
CloudfloorDNS US East
25 Corporate Drive
4th Floor, Burlington MA
01803 USA
+1.781.373.5823

CloudfloorDNS US West
155 North Lake Avenue
Suite 900, Pasadena, CA
91101 USA
+1.781.373.5823

That's it on the NS1 side for now, we'll come back to NS1 in the last few steps to add CloudfloorDNS to the delegation. Now we need to login to our CloudfloorDNS account at <https://Panel.CloudfloorDNS.com>

Add Secondary DNS on your CloudfloorDNS account

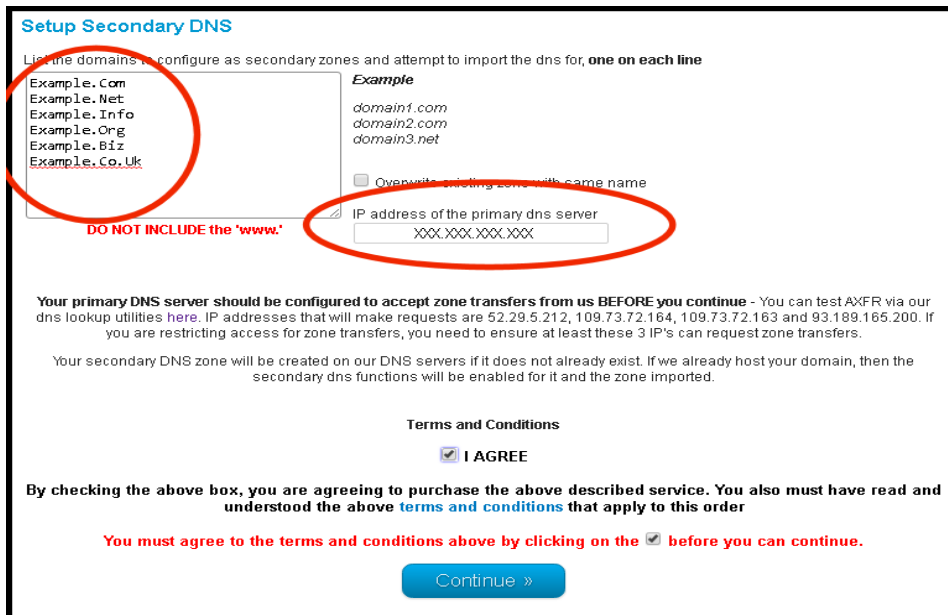
1. Login to CloudfloorDNS and select DNS SERVICES, SETUP DNS, SECONDARY DNS as shown in the screenshot below:



2. You now add your Domain name that you'll be using to setup Secondary DNS. Add them to the list as shown below. Enter domains one per line, or a single domain. You also need to enter the IP Address from NS1 where you'll be pulling zone information from. NS1 has a domain name called xfr01.nsone.net for AXFR transfers and this translates to the IP of 192.241.159.119

Enter the NS1 AXFR PRIMARY DNS SERVER as shown below. We used **192.241.159.119**

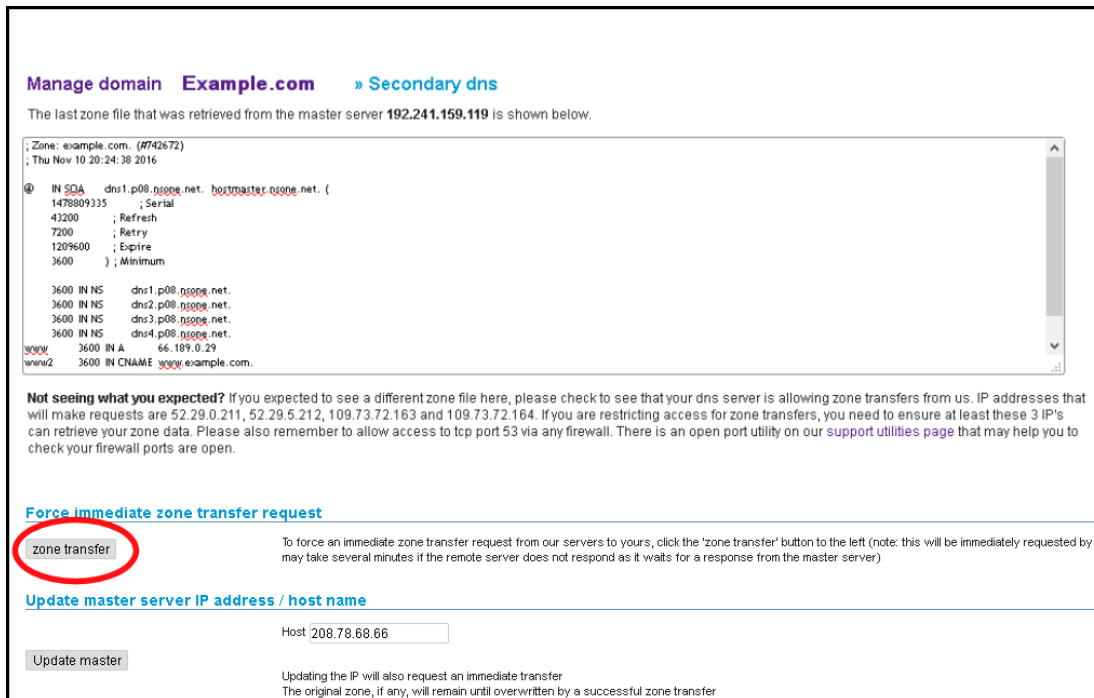
Agree to the Terms of Service and then click continue.

A screenshot of the 'Setup Secondary DNS' form. The form title is 'Setup Secondary DNS'. Below the title, it says 'List the domains to configure as secondary zones and attempt to import the dns for, one on each line'. There is a text input field with a list of domain examples: 'Example.Com', 'Example.Net', 'Example.Info', 'Example.Org', 'Example.Biz', 'Example.Co.Uk'. To the right, there is an 'Example' section with 'domain1.com', 'domain2.com', and 'domain3.net'. Below the domain list, there is a checkbox labeled 'Overwrite existing zone with same name'. Below that, there is a text input field for 'IP address of the primary dns server' with the placeholder 'XXX.XXX.XXX.XXX'. Below the form, there is a section for 'Terms and Conditions' with a checked checkbox labeled 'I AGREE'. Below that, there is a paragraph of text: 'By checking the above box, you are agreeing to purchase the above described service. You also must have read and understood the above terms and conditions that apply to this order'. Below that, there is a red line of text: 'You must agree to the terms and conditions above by clicking on the [checked checkbox] before you can continue.'. At the bottom, there is a blue 'Continue »' button.

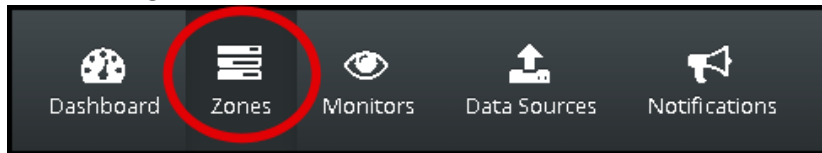
3. You've now added the secondary zone and it's ready to be replicated. Replication takes place immediately and will also take place every 60 minutes automatically. If you wish to propagate these changes sooner, you can pull the changes manually using an API call or the management interface. Login to the CloudfloorDNS platform and click on the domain name you are forcing zone replication on. Now that you are on the domain details page, look in the far upper right corner for the "quick links" area – Click on the Secondary DNS "S" icon as shown circled in the screenshot below:



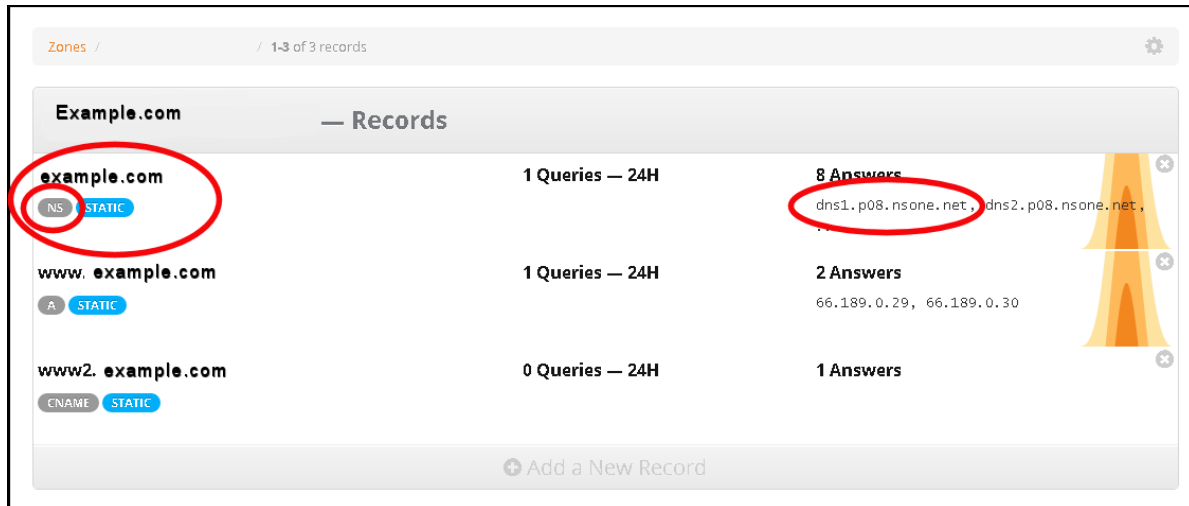
4. Now you'll be in the Secondary DNS options for your domain. You'll see the zone data below and the status on the last zone transfer. To force an immediate XFR of the zone records, click the ZONE TRANSFER button as shown circled in the screenshot shown below. You can also force a zone replication using the API. Please contact your account manager about using the API for secondary replication.



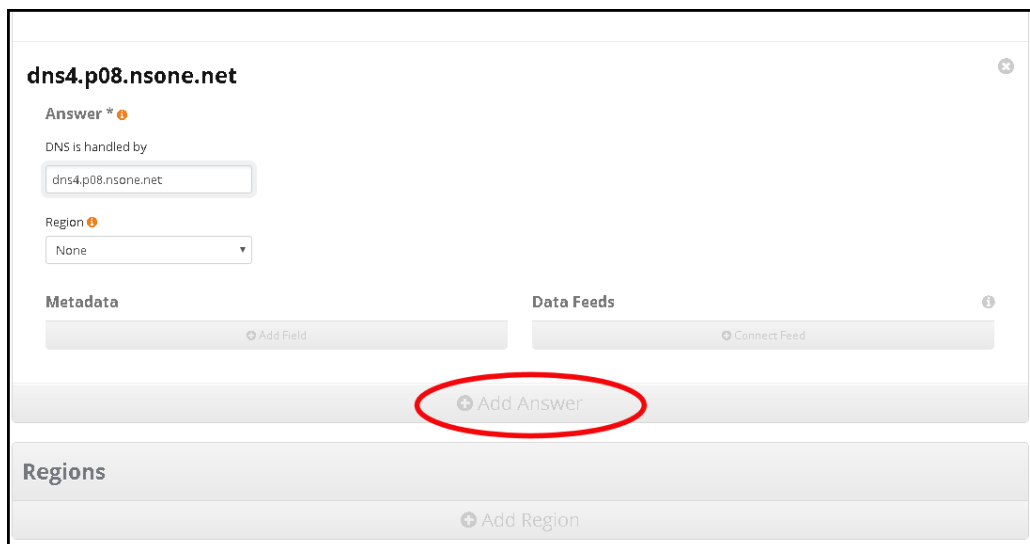
5. The last step in the process is to add CloudfloorDNS Anycast Name Servers into your public delegation for your domain. Login to NS1, and click on the zones icon as shown below:



6. Click on the Zone you wish to edit link on the domain name you want to setup Secondary DNS on. Once you do that you'll see the zone and records as shown below. You want to add NS records, so we look for the NS records and click on them. Look for the "NS" record type as we have shown below



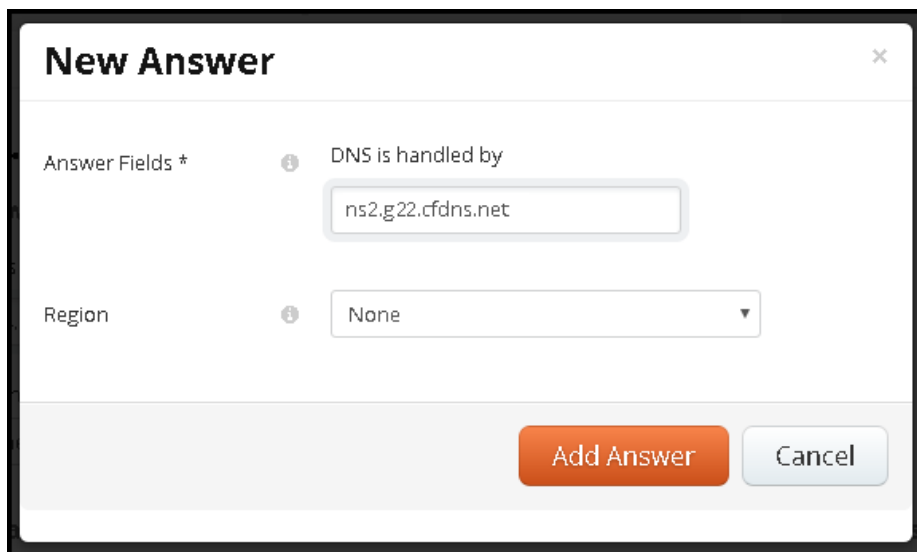
7. After you click on the NS records, you'll be presented with a list of your DNS servers. You want to add in 4 CloudfloorDNS servers into the records. Scroll all the way down to the bottom of this screen and click ADD ANSWER button.



8. You'll now see the option to add a nameserver to the zone. Enter in the CloudfloorDNS name servers you were assigned. In this case, we are assigned to pool 22, using the following nameservers:

ns1.g22.cfdns.net
ns2.g22.cfdns.biz
ns3.g22.cfdns.info
ns4.g22.cfdns.co.uk

Enter in the first nameserver as shown below and click the **Add Answer** button. We need to add the four servers above to the zone. Do this for each of the nameservers listed above. This means we will have to do this four times. Please note your name servers may be different since CloudfloorDNS uses DNS pools for optimum performance. If you have questions about what nameservers to use in your delegation, please check with your Account manager or CloudfloorDNS support before continuing. Once you are done adding in the four nameservers from CloudfloorDNS, scroll to the top right and click the SAVE CHANGES button



9. You should now login to CloudfloorDNS perform a manual zone replication to ensure that everything is in sync. Although replication will take place every 60 minutes automatically, you should pull these changes up and do this forced replication when you make any changes to the master zonefile at NS1. To activate the AXFR command on the zone, login to CloudfloorDNS and then select Domains from the menu and then select Manage Domains. Click on the domain name you are forcing zone replication on. Now that you are on the domain details page, look in the far upper right corner for the "quick links" area – Click on the Secondary DNS "S" icon as shown circled in the screenshot below:



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01803 USA
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Suite 900, Pasadena, CA
91101 USA
+1.781.373.5823

Now you'll be in the Secondary DNS options for your domain. You'll see the zone data below and the status on the last zone transfer. Now that you have the CFDNS Anycast servers in the zone you can force the XFR transfer once more to pull the latest zonefile over to CloudfloorDNS.

To force an immediate XFR of the zone records, click the ZONE TRANSFER button as shown circled in the screenshot shown below. You can also force a zone replication using the API. Please contact your account manager about using the API for secondary replication.

Manage domain Example.com » Secondary dns

The last zone file that was retrieved from the master server **192.241.159.119** is shown below.

```
1209600 ; Expiry
3600 ; Minimum

3600 IN NS dns1.p08.n300e.net.
3600 IN NS dns2.p08.n300e.net.
3600 IN NS dns3.p08.n300e.net.
3600 IN NS dns4.p08.n300e.net.
3600 IN NS ns1.g02.cfdsn.net.
3600 IN NS ns2.g02.cfdsn.biz.
3600 IN NS ns3.g02.cfdsn.info.
3600 IN NS ns4.g02.cfdsn.co.uk.
www 3600 IN A 66.189.0.29
www 3600 IN A 66.189.0.30
www2 3600 IN CNAME www.example.com.
```

Not seeing what you expected? If you expected to see a different zone file here, please check to see that your dns server is allowing zone transfers from us. IP addresses that will make requests are 52.29.0.211, 52.29.5.212, 109.73.72.163 and 109.73.72.164. If you are restricting access for zone transfers, you need to ensure at least these 3 IP's can retrieve your zone data. Please also remember to allow access to tcp port 53 via any firewall. There is an open port utility on our [support utilities page](#) that may help you to check your firewall ports are open.

Force immediate zone transfer request

zone transfer To force an immediate zone transfer request from our servers to yours, click the 'zone transfer' button to the left (note: this will be immediately requested by may take several minutes if the remote server does not respond as it waits for a response from the master server)

Update master server IP address / host name

Host

Update master

Updating the IP will also request an immediate transfer
The original zone, if any, will remain until overwritten by a successful zone transfer

You now have secondary DNS replicating your zonefile from NS1 to CloudfloorDNS. CloudfloorDNS will now backup your DNS zone(s) but there is one last step in the process before CloudfloorDNS will start answering alongside of NS1.

Adding CloudfloorDNS Name Servers to your Delegation

This final step is done at your domain name registrar (GoDaddy, Network Solutions, etc)

The last step in the process is to add CloudfloorDNS Anycast Name Servers into your public delegation for your domain. This is typically done at the registrar where you hold the domain name. This could be GoDaddy, Network Solutions, etc. Login to your domain registrar, and add in the following Name Server records into the "Set Name Servers for your domain" area under DNS

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Add in the custom list of CloudfloorDNS name servers alongside your DNS Servers you have list for NS1. The list below is similar but not what you should use. When you sign up for Secondary DNS Cloudfloor will assign you a custom list of nameservers for your account.

ns3.g22.cfdns.info
ns1.g22.cfdns.net
ns2.g22.cfdns.biz
ns4.g22.cfdns.co.uk

Save these settings, your Secondary DNS will now start working and answering along with your primary DNS. You will see queries drop at your main location and CloudfloorDNS will start to balance out the DNS Queries. You can check your stats and replication status under the Domain Management panel at any time.

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