



CLOUDFLARE™

Training for CloudFlare's Certified Hosting Providers

Part IV: Technical Troubleshooting

Learn how to resolve common troubleshooting questions

Troubleshooting Guide

- I. How do I tell if CloudFlare is enabled?
- II. CloudFlare activated but not working or no statistics
- III. Customer cannot access their website

Once CloudFlare is Enabled

What stays the same	What changes
Hosting Provider	CNAME
Registrar	IP is modified
Authoritative DNS	

- Enabling CloudFlare means an edit to the CNAME
- The name servers do not change (different that if a website signs up directly through CloudFlare)
- CloudFlare ***only works*** on CNAMEs

How do I tell if CloudFlare is Enabled?

Perform a 'dig' in Terminal

```
; <> DiG 9.7.3-P3 <> www.leftleftleft.in
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 1806
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;www.leftleftleft.in.          IN      A

;; ANSWER SECTION:
www.leftleftleft.in.         11879   IN      CNAME   leftleftleft.in.
leftleftleft.in.             11879   IN      A       50.116.80.208

;; Query time: 6 msec
;; SERVER: 208.67.222.222#53(208.67.222.222)
;; WHEN: Thu Apr  5 16:36:33 2012
;; MSG SIZE rcvd: 67
```

A Dig Command Shows If CloudFlare Is On

```
; <>> DiG 9.7.3-P3 <>> www.leftleftleft.in
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 19514
;; flags: qr rd ra; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;www.leftleftleft.in.      IN      A

;; ANSWER SECTION:
www.leftleftleft.in.      1380    IN      CNAME   www.leftleftleft.in.cdn.cloudflare.net.
www.leftleftleft.in.cdn.cloudflare.net. 520 IN CNAME cf-protected-www.leftleftleft.in.cdn.cloudflare.net.
cf-protected-www.leftleftleft.in.cdn.cloudflare.net. 220 IN A 173.245.60.153
cf-protected-www.leftleftleft.in.cdn.cloudflare.net. 220 IN A 173.245.60.60

;; Query time: 6 msec
;; SERVER: 208.67.222.222#53(208.67.222.222)
;; WHEN: Thu Apr  5 16:45:35 2012
;; MSG SIZE rcvd: 152
```

Is a Customer Using CloudFlare?

```
; <=> DiG 9.7.3-P3 <=> www.leftleftleft.in
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 1806
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;www.leftleftleft.in.          IN      A

;; ANSWER SECTION:
www.leftleftleft.in.  11879   IN      CNAME   leftleftleft.in.
leftleftleft.in.      11879   IN      A       50.116.80.208

;; Query time: 6 msec
;; SERVER: 208.67.222.222#53(208.67.222.222)
;; WHEN: Thu Apr 5 16:36:33 2012
;; MSG SIZE rcvd: 67
```

Site without CloudFlare

```
; <=> DiG 9.7.3-P3 <=> www.leftleftleft.in
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 19514
;; flags: qr rd ra; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;www.leftleftleft.in.          IN      A

;; ANSWER SECTION:
www.leftleftleft.in.  1380    IN      CNAME   www.leftleftleft.in.cdn.cloudflare.net.
www.leftleftleft.in.cdn.cloudflare.net. 520 IN CNAME cf-protected-www.leftleftleft.in.cdn.cloudflare.net.
cf-protected-www.leftleftleft.in.cdn.cloudflare.net. 220 IN A 173.245.60.153
cf-protected-www.leftleftleft.in.cdn.cloudflare.net. 220 IN A 173.245.60.60

;; Query time: 6 msec
;; SERVER: 208.67.222.222#53(208.67.222.222)
;; WHEN: Thu Apr 5 16:45:35 2012
;; MSG SIZE rcvd: 152
```

Site with
CloudFlare

Troubleshooting Techniques

- I. How do I tell if CloudFlare is enabled?
- II. CloudFlare is activated, but it's not working or there are no statistics
- III. Customer cannot access their website

No Traffic to Subdomain

What happened:

- Traffic may be routing to a root domain or other A record

What can you do:

- CloudFlare works via CNAME
- For root domains add a redirect to www
- For all other A records – change to a CNAME

Changing an A Record to CNAME



CPanel 11

CloudFlare Account

Now that CloudFlare is activated, you can see quick statistics for your website and manage the basic CloudFlare settings right here from your control panel. Statistics take 24 hours to first appear and subsequently update once per day.

To access all of your reports and CloudFlare settings, log in to your [CloudFlare.com](#) account. Hint: The first time you go to your CloudFlare.com account, use the 'I forgot my password' feature to set a password.

Remember: You can activate and deactivate CloudFlare for each website by toggling between the orange and grey cloud.

Site	Status	CloudFlare Status
[Edit] gator-cloudflare.com	Powered by CloudFlare	Statistics and Settings 

TYPE	NAME	RECORD	CLOUDFLARE STATUS
CNAME	www.gator-cloudflare.com	points to www.gator-cloudflare.com.cdn.cloudflare.net	
CNAME	test.gator-cloudflare.com	points to gator-cloudflare.com	
A	whm.gator-cloudflare.com	50.116.80.208	Want to run on CloudFlare?
A	webdisk.gator-cloudflare.com	50.116.80.208	Want to run on CloudFlare?

Change here

CloudFlare Not Turned On For Subdomain

What happened:

- Customer has not turned CloudFlare on for the subdomain

What can you do:

- Make sure the cloud is toggled to orange (not grey)
- Test the subdomain by running a 'dig' in Terminal
 - **dig subdomain.example.com**
 - an output with **cdn.cloudflare.net** indicates that traffic is passing through CloudFlare's network.

DNS Has Not Propagated Yet

Follow the steps below to diagnose (“www” is assumed to be a CNAME)

Step 1: On the cPanel server, do the following dig:

- **dig www.mydomain.com @127.0.0.1**

Step 2: On the cPanel server, do the following dig:

- **dig www.mydomain.com**

Step 3: On the Desktop, customers should do the following dig:

- **dig www.mydomain.com**
- If you do not get the **".cdn.cloudflare.net"** output in one or more of the steps above, that is where DNS is not propagating properly
- Escalate the issue to your Tier 2 support and copy partners@cloudflare.com

Troubleshooting Techniques

- I. How do I tell if CloudFlare is enabled?
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502 Bad Gateway Error Page & Resolution

502 Bad Gateway

cloudflare-nginx

What happened:

- CloudFlare's network is having an issue
- Usually limited to one server in one data center
- Affects only a portion of the site's visitors
- CloudFlare Technical Operations team deals with these quickly (<10 minutes)

What can you do:

- Check @CloudFlareSys on Twitter for latest status
- Ask customer to email help@cloudflare.com with:
 - geographic location of error page and
 - an output of a traceroute search
- Temporarily toggle CloudFlare to off (gray cloud)

Website Offline, No Cached Version Available



This website is offline

No cached version is available

What's wrong?

The most likely causes:

- The server is down for maintenance
- There may be a network problem
- The site may be experiencing excessive load

[Retry for a live version of the site](#)

What's CloudFlare?

This website uses CloudFlare in order to help keep it online when the server is down by serving cached copies of pages when they are unavailable. Unfortunately, a cached copy of the page you requested is not available, but you may be able to reach other cached pages on the site.



Resolve: Website Offline, No Cached Version

What happened:

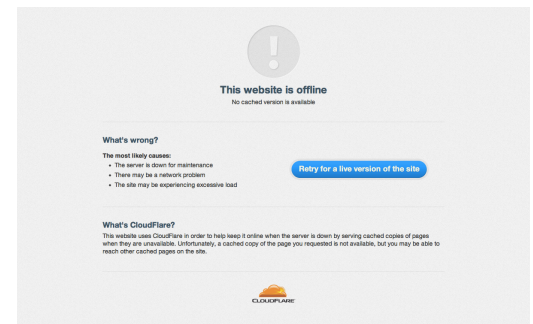
CloudFlare cannot connect to the origin server:

- The server is online, but it is blocking CloudFlare's requests
- The origin server is offline and CloudFlare doesn't have a cached copy of the website

What can you do:

Ask your customer to:

- Check firewall settings
- Verify that CloudFlare's IP addresses are whitelisted
- Access updated list at www.cloudflare.com/ips
- Work with your customer to determine why their server is offline



Server Offline vs. Blocked CloudFlare IP

Perform a 'CURL' in Terminal

```
root@li375-37:~# curl -v -H "host: www.leftleftleft.com" leftleftleft.com
* About to connect() to leftleftleft.com port 80 (#0)
*   Trying 96.126.126.37... Connection refused
* couldn't connect to host
* Closing connection #0
curl: (7) couldn't connect to host
```

'Couldn't connect to host'
indicates server is offline

Server Offline vs. Blocked CloudFlare IP

Perform a 'cURL' in Terminal

```
wedge:~ jeromechen$ curl -v -H "host: www.leftleftleft.in" leftleftleft.in > /dev/null
* About to connect() to leftleftleft.in port 80 (#0)
* Trying 50.116.80.208... % Total    % Received % Xferd  Average Speed   Time    Time       Time  Current
                          Dload  Upload  Total  Spent    Left  Speed
   0    0    0    0    0    0    0    0  --:--:-- --:--:-- --:--:--    0connected
* Connected to leftleftleft.in (50.116.80.208) port 80 (#0)
> GET / HTTP/1.1
> User-Agent: curl/7.21.4 (universal-apple-darwin11.0) libcurl/7.21.4 OpenSSL/0.9.8r zlib/1.2.5
> Accept: */*
> host: www.leftleftleft.in
>
< HTTP/1.1 200 OK
< Date: Tue, 10 Apr 2012 14:00:57 GMT
< Server: Apache/2.2.22 (Unix) mod_ssl/2.2.22 OpenSSL/0.9.8e-fips-rhel5 DAV/2 mod_auth_passthrough/2.1 mod_bwlimited/1.4 FrontPage/5.0.2.2635 mod_qos/9.74
< Content-Length: 405
< Content-Type: text/html; charset=ISO-8859-1
<
{ [data not shown]
100  405 100  405    0    0 3483    0  --:--:-- --:--:-- --:--:-- 6750* Connection #0 to host leftleftleft.in
left intact

* Closing connection #0
```

HTML output indicates
CloudFlare's IPs are being blocked

Host Not Configured to Serve Web Traffic



Host Not Configured to Serve Web Traffic

You've requested a page on a website (www.leftleftleft.in) that is on the [CloudFlare](#) network. Unfortunately, the host web server does not appear to be configured to accept web traffic or serve web traffic. If you are the owner of this website, you should [login to CloudFlare](#) and change the DNS records for to resolve to a server configured to serve web traffic.

If you continue to experience this error, you may [contact support](#). Please reference the following information in your message:

- Timestamp: Fri, 06 Apr 2012 10:24:10 -0700
- Your IP address: 173.245.57.22
- Requested URL: www.leftleftleft.in/
- Error reference number: 1004
- Server ID: FL_4F1
- Process ID: PID_1333733050.224-1-2241265861
- User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_7_3) AppleWebKit/535.19 (KHTML, like Gecko) Chrome/18.0.1025.151 Safari/535.19



Your IP: 173.245.57.22 © 2011 CloudFlare, Inc.

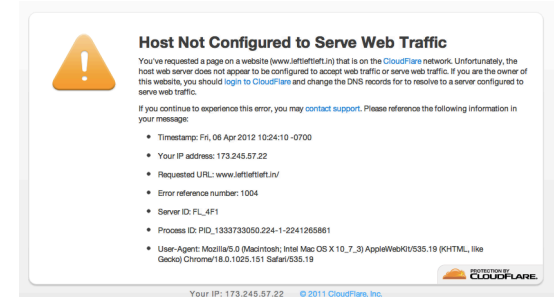
Resolve: Host Not Configured to Serve Web Traffic

What happened:

- Customer visited their website immediately after activation
- DNS hasn't propagated properly

What can you do:

- Error will resolve itself within 5-10 minutes
- If it doesn't:
 - check if **cloudflare.mydomain.com** is resolving and if not
 - escalate the issue to your Tier 2 support and copy partners@cloudflare.com





Problem/Question Unresolved

- First, deactivate CloudFlare
- Contact CloudFlare's support at partners@cloudflare.com
- **In the Support Ticket to CloudFlare, include:**
 - The domain
 - Details about the issue
 - Error page description (better yet, a screenshot)

Still Have Questions

Additional Resources

FAQ	www.cloudflare.com/wiki/Hosting_Partners:_Frequently_Asked_Questions
Troubleshooting	www.cloudflare.com/wiki/Hosting_Partners:_Troubleshooting_Help
Technical Support	http://support.cloudflare.com/cgi/discussion/new (select the Hosting Partner Support category)
General questions	partners@cloudflare.com
System Status 	@cloudflaresys
Follow us 	@cloudflare

Three Takeaways to Keep in Mind

1. CloudFlare makes websites:

Faster

Safer

Smarter

2. Any customer can use CloudFlare

3. Issues or questions? Email partners@cloudflare.com