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# **certbot-dns-cloudflare Documentation**

*Release 0*

**Certbot Project**

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The `dns_cloudflare` plugin automates the process of completing a `dns-01` challenge (`DNS01`) by creating, and subsequently removing, TXT records using the Cloudflare API.



# CHAPTER 1

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## Named Arguments

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<code>--dns-cloudflare-credentials</code>	Cloudflare <i>credentials</i> INI file. (Required)
<code>--dns-cloudflare-propagation-timeout</code>	The number of seconds to wait for DNS to propagate before asking the ACME server to verify the DNS record. (Default: 10)





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## Credentials

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Use of this plugin requires a configuration file containing Cloudflare API credentials, obtained from your [Cloudflare account page](#).

Previously, Cloudflare’s “Global API Key” was used for authentication, however this key can access the entire Cloudflare API for all domains in your account, meaning it could cause a lot of damage if leaked.

Cloudflare’s newer API Tokens can be restricted to specific domains and operations, and are therefore now the recommended authentication option.

However, due to some shortcomings in Cloudflare’s implementation of Tokens, Tokens created for Certbot currently require `Zone:Zone:Read` and `Zone:DNS>Edit` permissions for **all** zones in your account. While this is not ideal, your Token will still have fewer permission than the Global key, so it’s still worth doing. Hopefully Cloudflare will improve this in the future.

Using Cloudflare Tokens also requires at least version 2.3.1 of the `cloudflare` python module. If the version that automatically installed with this plugin is older than that, and you can’t upgrade it on your system, you’ll have to stick to the Global key.

Listing 1: Example credentials file using restricted API Token (recommended):

```
# Cloudflare API token used by Certbot
dns_cloudflare_api_token = 0123456789abcdef0123456789abcdef01234567
```

Listing 2: Example credentials file using Global API Key (not recommended):

```
# Cloudflare API credentials used by Certbot
dns_cloudflare_email = cloudflare@example.com
dns_cloudflare_api_key = 0123456789abcdef0123456789abcdef01234
```

The path to this file can be provided interactively or using the `--dns-cloudflare-credentials` command-line argument. Certbot records the path to this file for use during renewal, but does not store the file’s contents.

**Caution:** You should protect these API credentials as you would the password to your Cloudflare account. Users who can read this file can use these credentials to issue arbitrary API calls on your behalf. Users who can cause Certbot to run using these credentials can complete a `dns-01` challenge to acquire new certificates or revoke existing certificates for associated domains, even if those domains aren't being managed by this server.

Certbot will emit a warning if it detects that the credentials file can be accessed by other users on your system. The warning reads “Unsafe permissions on credentials configuration file”, followed by the path to the credentials file. This warning will be emitted each time Certbot uses the credentials file, including for renewal, and cannot be silenced except by addressing the issue (e.g., by using a command like `chmod 600` to restrict access to the file).

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## Examples

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Listing 1: To acquire a certificate for `example.com`

```
certbot certonly \  
  --dns-cloudflare \  
  --dns-cloudflare-credentials ~/.secrets/certbot/cloudflare.ini \  
  -d example.com
```

Listing 2: To acquire a single certificate for both `example.com` and `www.example.com`

```
certbot certonly \  
  --dns-cloudflare \  
  --dns-cloudflare-credentials ~/.secrets/certbot/cloudflare.ini \  
  -d example.com \  
  -d www.example.com
```

Listing 3: To acquire a certificate for `example.com`, waiting 60 seconds for DNS propagation

```
certbot certonly \  
  --dns-cloudflare \  
  --dns-cloudflare-credentials ~/.secrets/certbot/cloudflare.ini \  
  --dns-cloudflare-propagation-seconds 60 \  
  -d example.com
```



## CHAPTER 4

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### API Documentation

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Certbot plugins implement the Certbot plugins API, and do not otherwise have an external API.



## CHAPTER 5

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### Indices and tables

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