CHEATSHEET – WEBSITE SETUP

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INITIALIZE

Development Server: forge@13.229.90.223
Production Server: forge@35.183.8.67

We currently use Nginx as our web and app server, and could use it as a load balancer in the future as we may need it.

Then, on both servers depends on which you are working on, to start manipulating websites:

```
cd /etc/nginx
```

This cheatsheet will be done on the development server.

CREATE

To add a new website, we need to copy a configuration file to initialize it. This is what makes Nginx know what to do when an HTTP request is sent to the server, among others settings and configurations for the website. Cf an example of configuration file in the annex 1 below.

In the /etc/nginx folder, go to the sites-available folder. Here are the configuration files. You can then copy and paste one of them, using your website name.

```
sudo cp example.candy-staging.com newsite.candy-staging.com
```

Make sure you replace all the previous website name with the new one in the file :

```
:%s/oldone/newone/g
```

The new website is now officially available Nginx speaking.

Because Nginx could use extra configuration, we add a folder in the forge-conf folder (the *cp –r* is for copying directories):

```
cd forge-conf/

cp –r example.candy-staging.com newsite.candystaging.com
```

There should be three directories: **after**, **before** and **server** where you put all files related to what Nginx extra configurations, like a redirection for instance.

The last step should be to “enable” the website, deploying it. In the facts, we add a link to the sites-available configuration file.

> *cd sites-enabled*
>
> *ln –s /etc/nginx/sites-available/will.candy-staging.com ./*

The configuration is now done, we can create the folder the website will be built from, with a php index for instance. This one is located in the home directory.

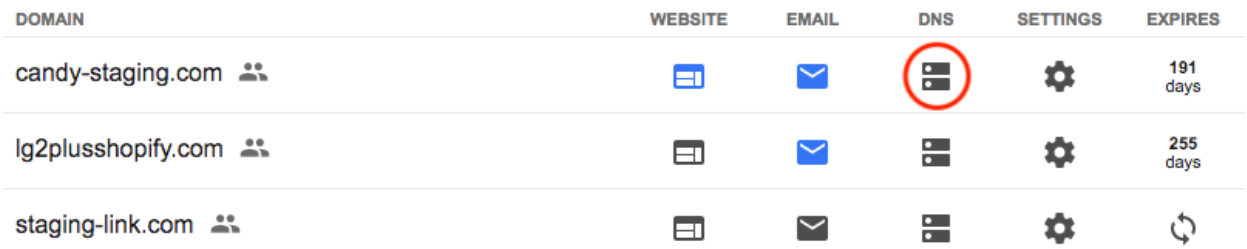
> *cd ~*
>
> *mkdir -p example.candy-staging.com/public ; cd example.candy-staging.com/public*
>
> *touch index.php*

All web development files will be located in the public folder. It is then basic web development.

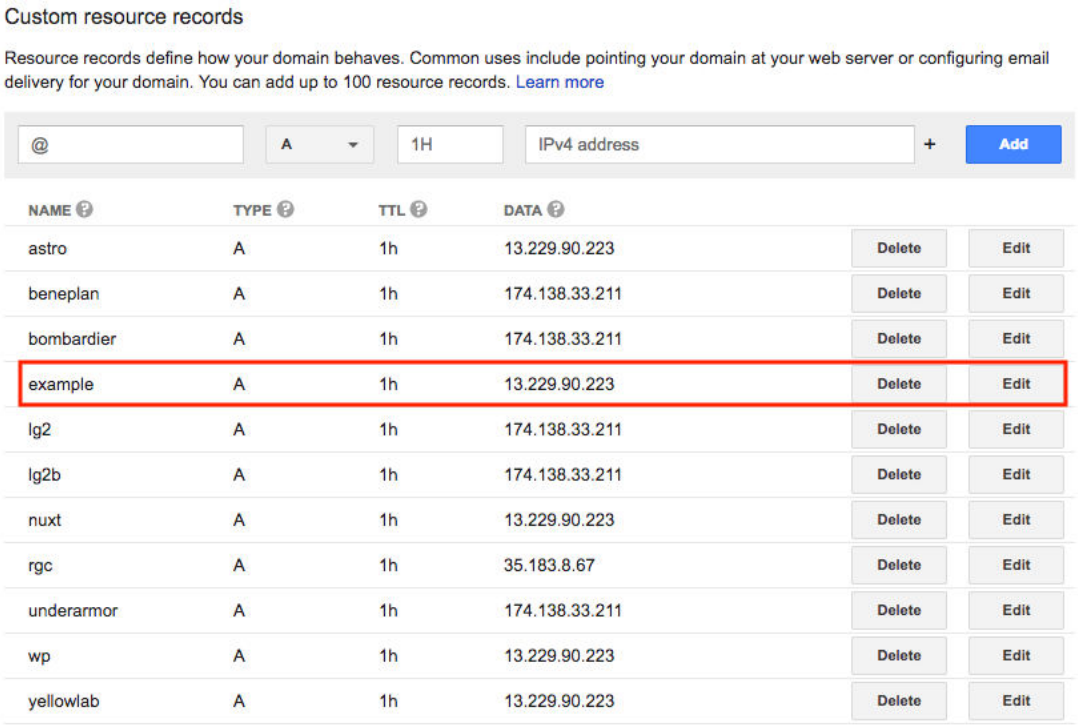
MANAGE DOMAIN

One of the instances we use to manage our domains is domains.google.com. The purchased domains are shown here. The website we created above should be added to the candy-staging domain.

If we want to add or edit , go to the DNS section (see fig. below)



The new website should be added under the Custom Resource Records section.



- The NAME is a domain, subdomain, or host name. The default is @.. It is the one you gave to your website above.
- The record's TYPE. For example, the A record or MX record. This is standard (See Annex 2).
- The TTL is how often a copy of the record stored in cache must be updated or discarded. The default is 1 hour.
- The DATA varies depending on the record type. For example, a host's IPv4 address for the A record type. Here, it would be the development server address.

You now should have a website up and running once the DNS has been resolved (5~10 minutes).

ISSUES

It can happen that there is an issue with your new website. Try *sudo service nginx reload* to have Nginx reload it.

ANNEXE 1

```
# FORGE CONFIG (DO NOT REMOVE!)
include forge-conf/example.candy-staging.com/before/*;

server {
    listen 80;
    listen [::]:80;
    server_name example.candy-staging.com;
    root /home/forge/example.candy-staging.com/public;

    # FORGE SSL (DO NOT REMOVE!)
    # ssl_certificate;
    # ssl_certificate_key;

    ssl_protocols TLSv1 TLSv1.1 TLSv1.2;
    ssl_ciphers 'ECDHE-RSA-AES128-GCM-SHA256:ECDHE-ECDSA-AES128-GCM-SHA256:ECDHE-RSA-
AES256-GCM-SHA384:ECDHE-ECDSA-AES256-GCM-SHA384:DHE-RSA-AES128-GCM-SHA256:DHE-
DSS-AES128-GCM-SHA256:kEDH+AESGCM:ECDHE-RSA-AES128-SHA256:ECDHE-ECDSA-AES128-
SHA256:ECDHE-RSA-AES128-SHA:ECDHE-ECDSA-AES128-SHA:ECDHE-RSA-AES256-SHA384:ECDHE-
ECDSA-AES256-SHA384:ECDHE-RSA-AES256-SHA:ECDHE-ECDSA-AES256-SHA:DHE-RSA-AES128-
SHA256:DHE-RSA-AES128-SHA:DHE-DSS-AES128-SHA256:DHE-RSA-AES256-SHA256:DHE-DSS-
AES256-SHA:DHE-RSA-AES256-SHA:AES128-GCM-SHA256:AES256-GCM-SHA384:AES128-
SHA256:AES256-SHA256:AES128-SHA:AES256-SHA:AES:CAMELLIA:DES-CBC3-
SHA:!aNULL:!eNULL:!EXPORT:!DES:!RC4:!MD5:!PSK:!aECDH:!EDH-DSS-DES-CBC3-SHA:!EDH-RSA-DES-
CBC3-SHA:!KRB5-DES-CBC3-SHA:!3DES';
    ssl_prefer_server_ciphers on;
    ssl_dhparam /etc/nginx/dhparams.pem;

    add_header X-Frame-Options "SAMEORIGIN";
    add_header X-XSS-Protection "1; mode=block";
    add_header X-Content-Type-Options "nosniff";

    index index.html index.htm index.php;

    charset utf-8;

    # FORGE CONFIG (DO NOT REMOVE!)
    include forge-conf/example.candy-staging.com/server/*;

    location / {
        try_files $uri $uri/ /index.php?$query_string;
    }

    location = /favicon.ico { access_log off; log_not_found off; }
    location = /robots.txt  { access_log off; log_not_found off; }
```

```
    access_log off;
    error_log  /var/log/nginx/example.candy-staging.com-error.log error;

    error_page 404 /index.php;

    location ~ \.php$ {
        fastcgi_split_path_info ^(.+\.php)(/.+)$;
        fastcgi_pass unix:/var/run/php/php7.1-fpm.sock;
        fastcgi_index index.php;
        include fastcgi_params;
    }

    location ~ /\.(?!well-known).* {
        deny all;
    }
}

# FORGE CONFIG (DO NOT REMOVE!)
include forge-conf/example.candy-staging.com/after/*;
```

ANNEXE 2

DNS Resource Records

Zone DNS database is a collection of resource records and each of the records provides information about a specific object. A list of most common records is provided below:

- Address Mapping records (A)
  The record A specifies IP address (IPv4) for given host. A records are used for conversion of domain names to corresponding IP addresses.
- IP Version 6 Address records (AAAA)
  The record AAAA (also quad-A record) specifies IPv6 address for given host. So it works the same way as the A record and the difference is the type of IP address.
- Canonical Name records (CNAME)
  The CNAME record specifies a domain name that has to be queried in order to resolve the original DNS query. Therefore CNAME records are used for creating aliases of domain names. CNAME records are truly useful when we want to alias our domain to an external domain. In other cases we can remove CNAME records and replace them with A records and even decrease performance overhead.
- Host Information records (HINFO)
  HINFO records are used to acquire general information about a host. The record specifies type of CPU and OS. The HINFO record data provides the possibility to use operating system specific protocols when two hosts want to communicate. For security reasons the HINFO records are not typically used on public servers.

  Note: Standard values in RFC 1010
- Integrated Services Digital Network records (ISDN)
  The ISDN resource record specifies ISDN address for a host. An ISDN address is a telephone number that consists of a country code, a national destination code, a ISDN Subscriber number and, optionally, a ISDN subaddress. The function of the record is only variation of the A resource record function.
- Mail exchanger record (MX)
  The MX resource record specifies a mail exchange server for a DNS domain name. The information is used by Simple Mail Transfer Protocol (SMTP) to route emails to proper hosts. Typically, there are more than one mail exchange server for a DNS domain and each of them have set priority.

[http://dns-record-viewer.online-domain-tools.com/