

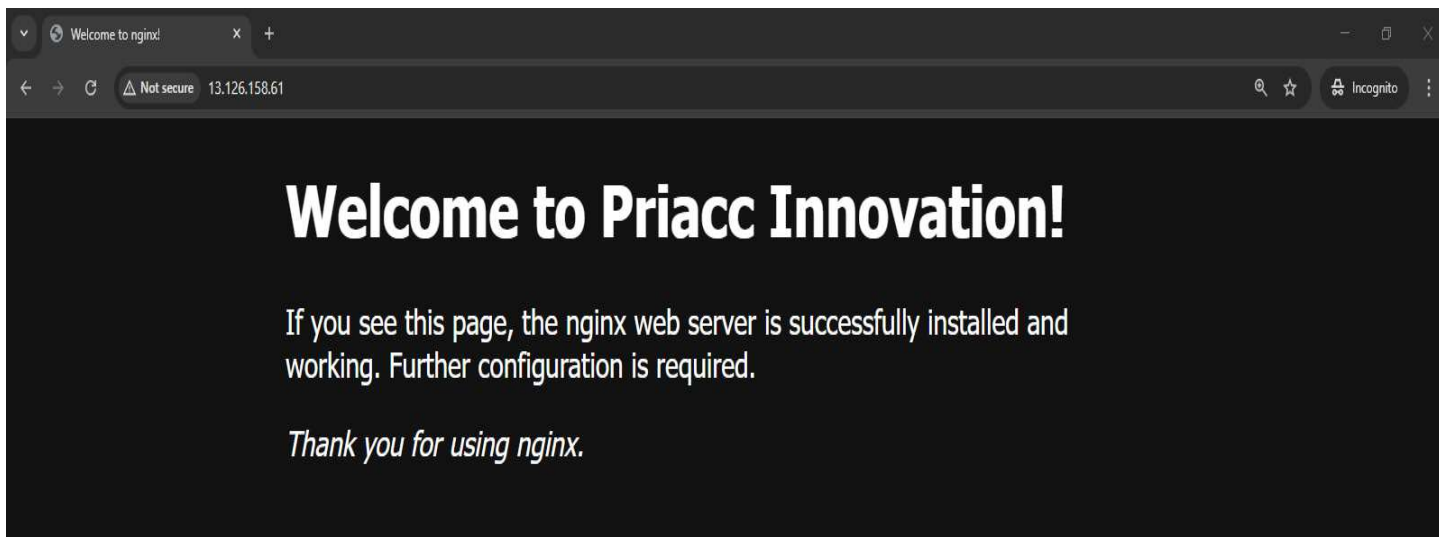
Configure HTTPS for Website Security with SSL

1. Configure EC2 Server with Website/web-application.

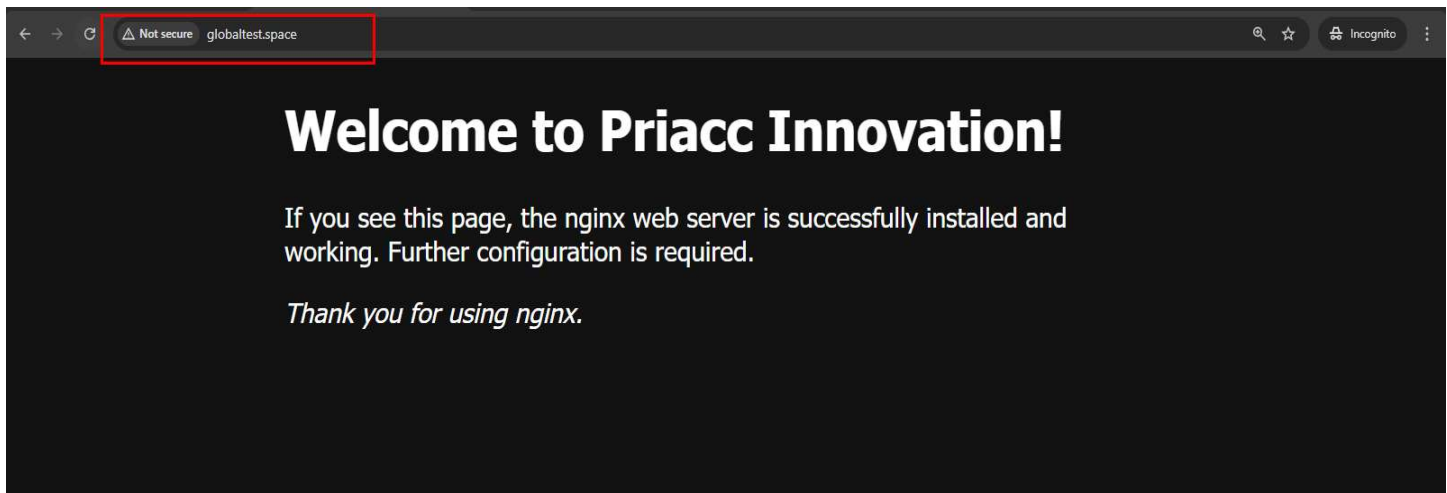
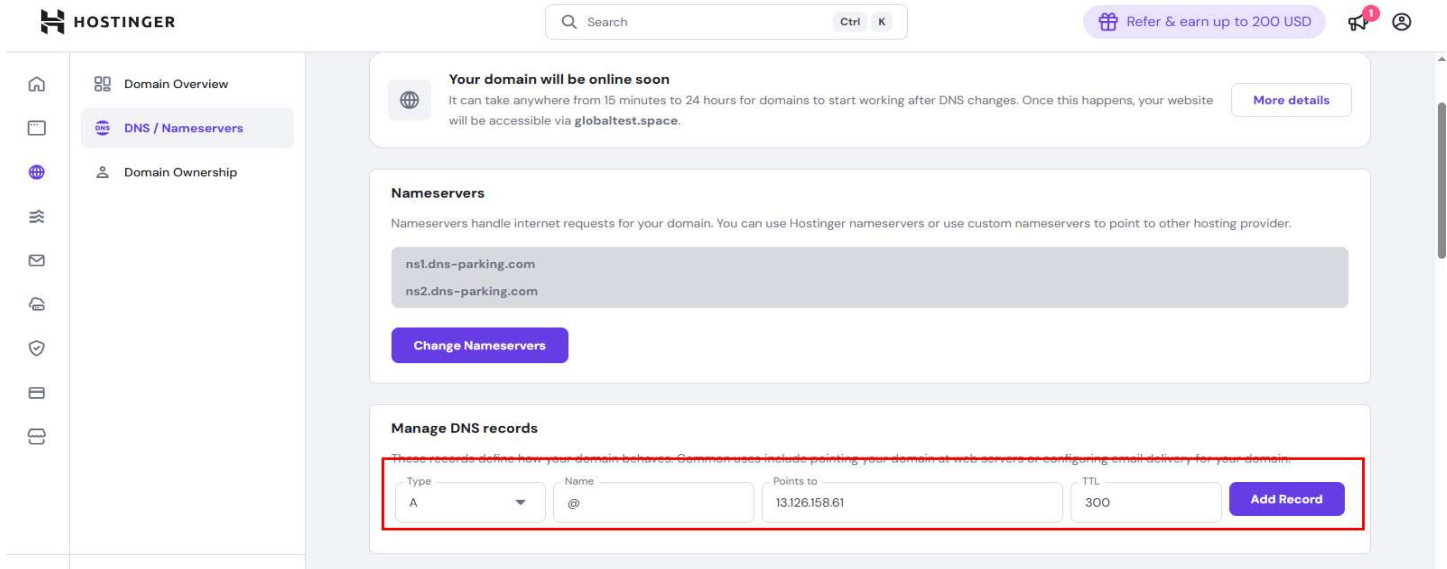
The screenshot shows the AWS Management Console interface. On the left, the navigation menu includes EC2, Dashboard, AWS Global View, Events, Instances, Images, Elastic Block Store, and Network & Security. The main content area displays the 'Instances (1/1)' page. A table lists the instances, with the 'Web-Server' instance (ID: i-04bf8f3b888715b4b) in the 'Running' state. Below the table, the details for the 'Web-Server' instance are shown, including the Public IPv4 address (13.126.158.61) and the Public DNS address (ec2-13-126-158-61.ap-south-1.compute.amazonaws.com).

```
root@ip-172-31-46-208:~# systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)
   Active: active (running) since Wed 2025-09-24 05:57:59 UTC; 22s ago
     Docs: man:nginx(8)
   Process: 2107 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited, status=0/SUCCESS)
   Process: 2109 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0/SUCCESS)
  Main PID: 2139 (nginx)
    Tasks: 3 (limit: 1008)
   Memory: 2.4M (peak: 5.3M)
      CPU: 27ms
   CGroup: /system.slice/nginx.service
           └─2139 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"
             └─2141 "nginx: worker process"
               └─2142 "nginx: worker process"

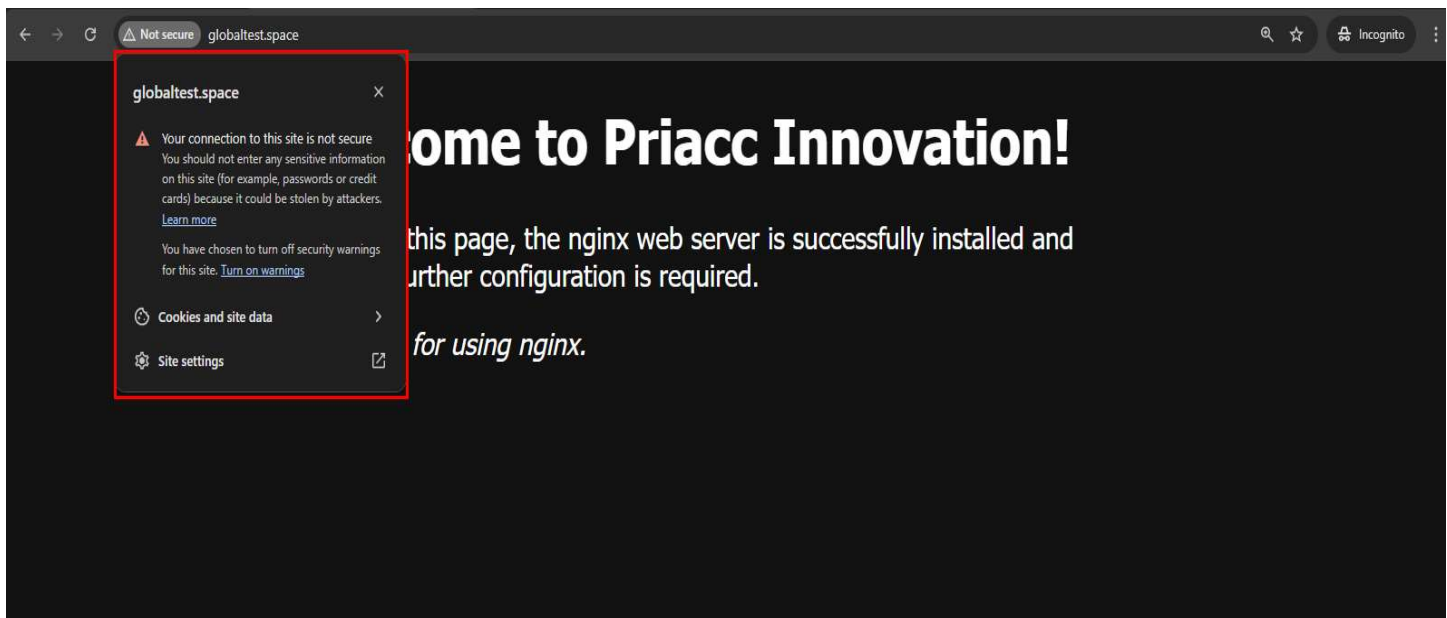
Sep 24 05:57:59 ip-172-31-46-208 systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...
Sep 24 05:57:59 ip-172-31-46-208 systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.
root@ip-172-31-46-208:~#
```



2. Mapping with Domain: A name Record



Still the website is Unsecured with DNS.



3. Let's Securing website/web-application using SSL.

```
aws [Search] [Alt+S] Asia Pacific (Mumbai) ▼

root@ip-172-31-46-208:/var/www/html# sudo apt install certbot python3-certbot-nginx -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  python3-acme python3-certbot python3-configargparse python3-icu python3-josepy python3-parsedatetime python3-rfc3339
Suggested packages:
  python3-certbot-doc python3-certbot-apache python-acme-doc python-certbot-nginx-doc
The following NEW packages will be installed:
  certbot python3-acme python3-certbot python3-certbot-nginx python3-configargparse python3-icu python3-josepy python3-parsedatetime python3-rfc3339
0 upgraded, 9 newly installed, 0 to remove and 0 not upgraded.
Need to get 1097 kB of archives.
After this operation, 5699 kB of additional disk space will be used.
Get:1 http://ap-south-1-ec2.archive.ubuntu.com/ubuntu noble/universe amd64 python3-josepy all 1.14.0-1 [22.1 kB]
```

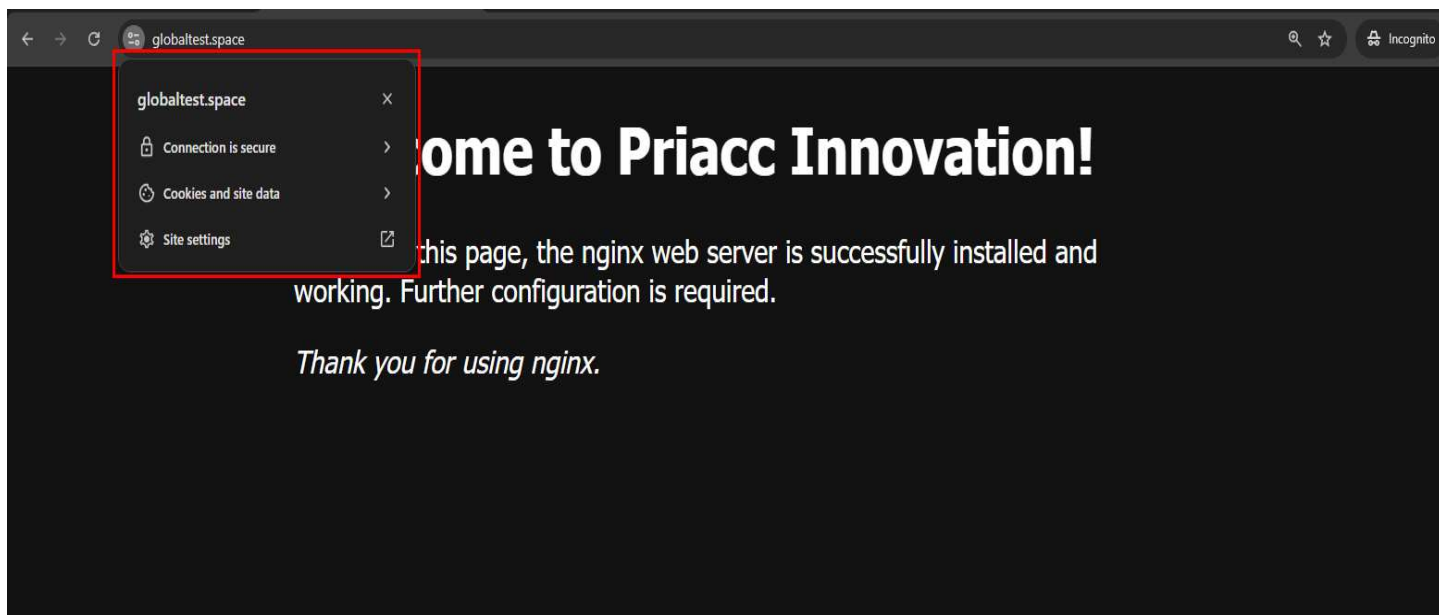
```
root@ip-172-31-46-208:/var/www/html# sudo certbot --nginx -d globaltest.space
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Requesting a certificate for globaltest.space

Successfully received certificate.
Certificate is saved at: /etc/letsencrypt/live/globaltest.space/fullchain.pem
Key is saved at: /etc/letsencrypt/live/globaltest.space/privkey.pem
This certificate expires on 2025-12-23.
These files will be updated when the certificate renews.
Certbot has set up a scheduled task to automatically renew this certificate in the background.

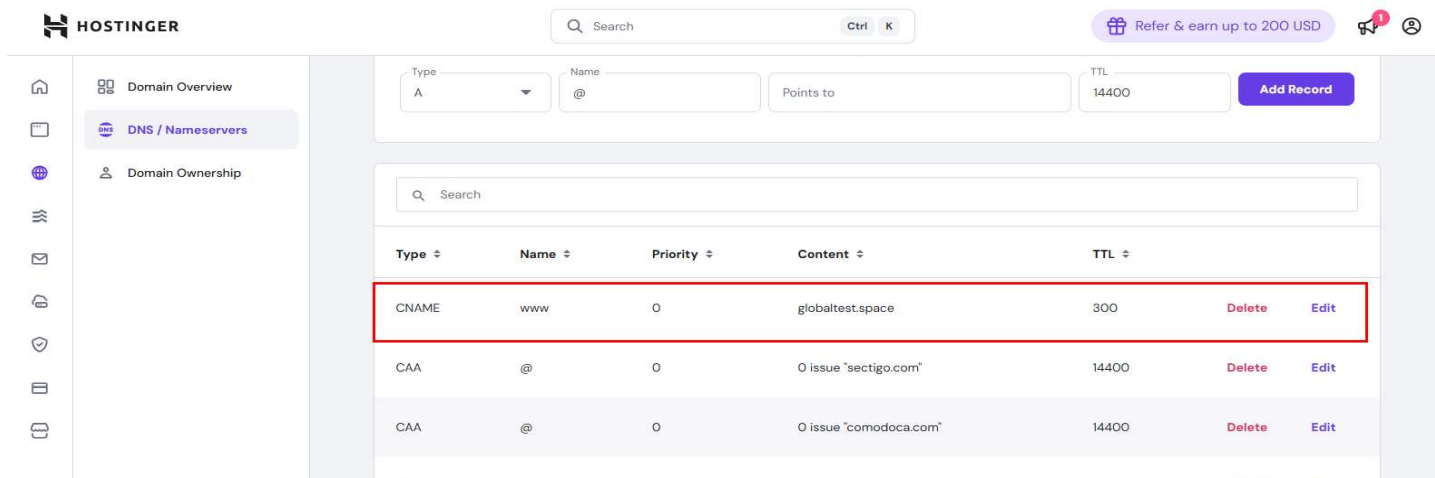
Deploying certificate
Successfully deployed certificate for globaltest.space to /etc/nginx/sites-enabled/default
Congratulations! You have successfully enabled HTTPS on https://globaltest.space

-----
If you like Certbot, please consider supporting our work by:
 * Donating to ISRG / Let's Encrypt: https://letsencrypt.org/donate
 * Donating to EFF: https://eff.org/donate-le
-----
root@ip-172-31-46-208:/var/www/html#
```

4. Verify with Domain.



5. Let's Configure with CName record.



HOSTINGER

Search

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Domain Overview

DNS / Nameservers

Domain Ownership

Type: A, Name: @, Points to: , TTL: 14400, Add Record

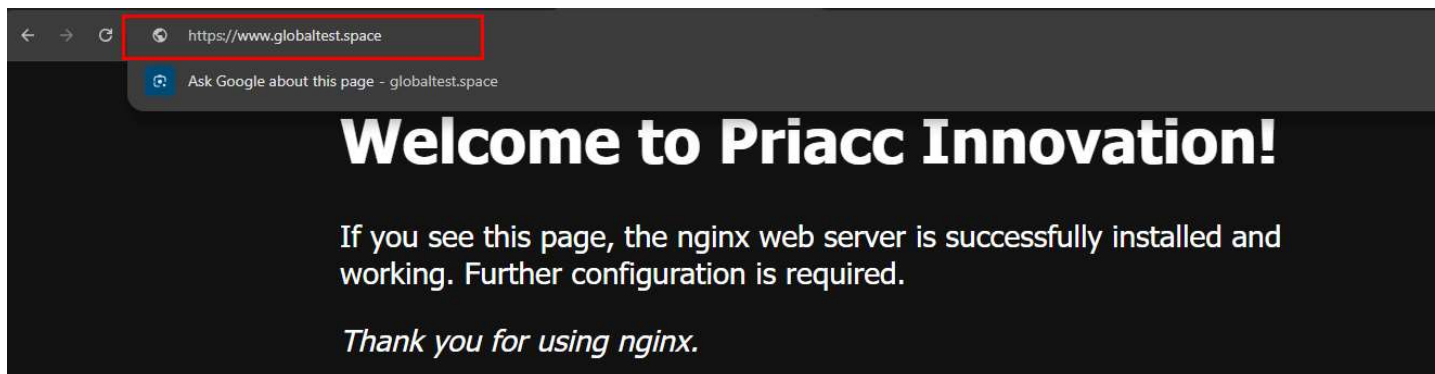
Type	Name	Priority	Content	TTL	Delete	Edit
CNAME	www	0	globaltest.space	300	Delete	Edit
CAA	@	0	O issue "sectigo.com"	14400	Delete	Edit
CAA	@	0	O issue "comodoca.com"	14400	Delete	Edit

```
root@ip-172-31-46-208:/var/www/html# sudo certbot --nginx -d www.globaltest.space
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Requesting a certificate for www.globaltest.space

Successfully received certificate.
Certificate is saved at: /etc/letsencrypt/live/www.globaltest.space/fullchain.pem
Key is saved at: /etc/letsencrypt/live/www.globaltest.space/privkey.pem
This certificate expires on 2025-12-23.
These files will be updated when the certificate renews.
Certbot has set up a scheduled task to automatically renew this certificate in the background.

Deploying certificate
Successfully deployed certificate for www.globaltest.space to /etc/nginx/sites-enabled/default
Congratulations! You have successfully enabled HTTPS on https://www.globaltest.space

-----
If you like Certbot, please consider supporting our work by:
* Donating to ISRG / Let's Encrypt: https://letsencrypt.org/donate
* Donating to EFF: https://eff.org/donate-le
-----
root@ip-172-31-46-208:/var/www/html#
```



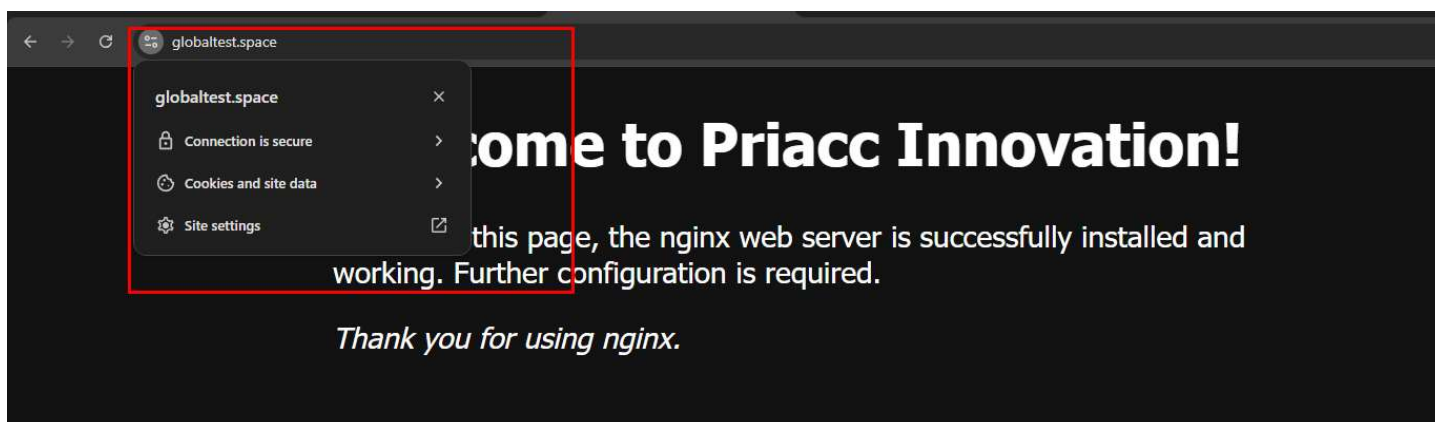
https://www.globaltest.space

Ask Google about this page - globaltest.space

Welcome to Priacc Innovation!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

Thank you for using nginx.



globaltest.space

globaltest.space

Connection is secure

Cookies and site data

Site settings

Welcome to Priacc Innovation!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

Thank you for using nginx.