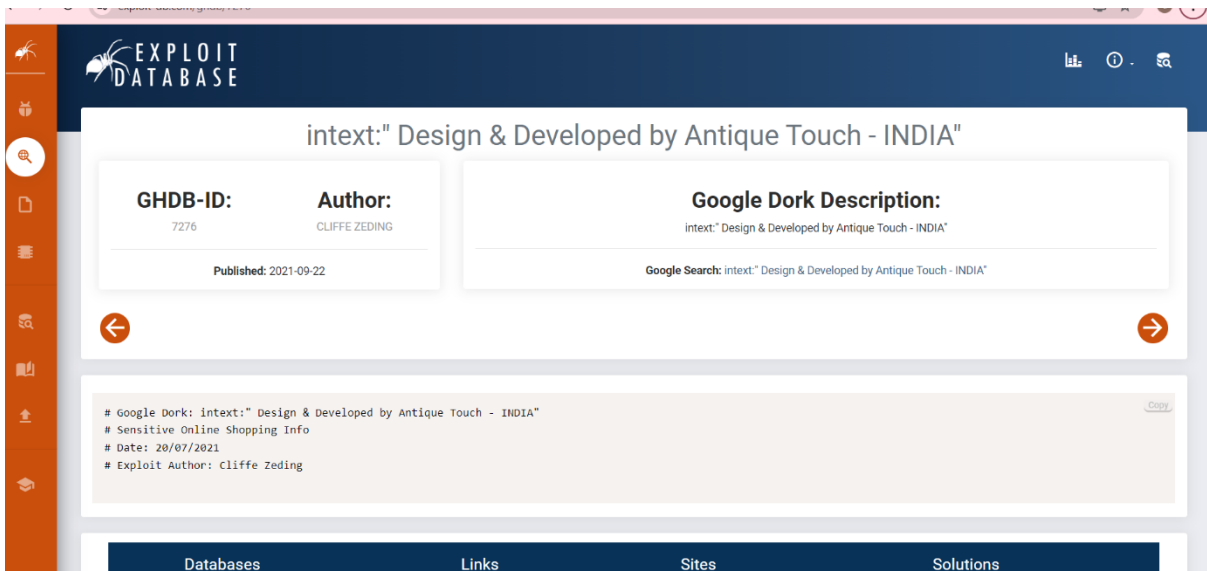


NAME: VAISHNAVI PARULEKAR	ROLL ID: 22203A0048
COURSE:CO (COMPUTER ENGINEERING)	Task Assignment: Use Google dorks to find vulnerabilities 1. XSS 2. SQL 3. CORS vulnerability 4. Email rate limiting 5. Google Dorks vulnerable sites
COMPANY: SECURER CYBER FUTURE	COLLEGE: VIDYALANKAR POLYTECHNIC

## REPORT

### XSS (Cross Site Scripting)



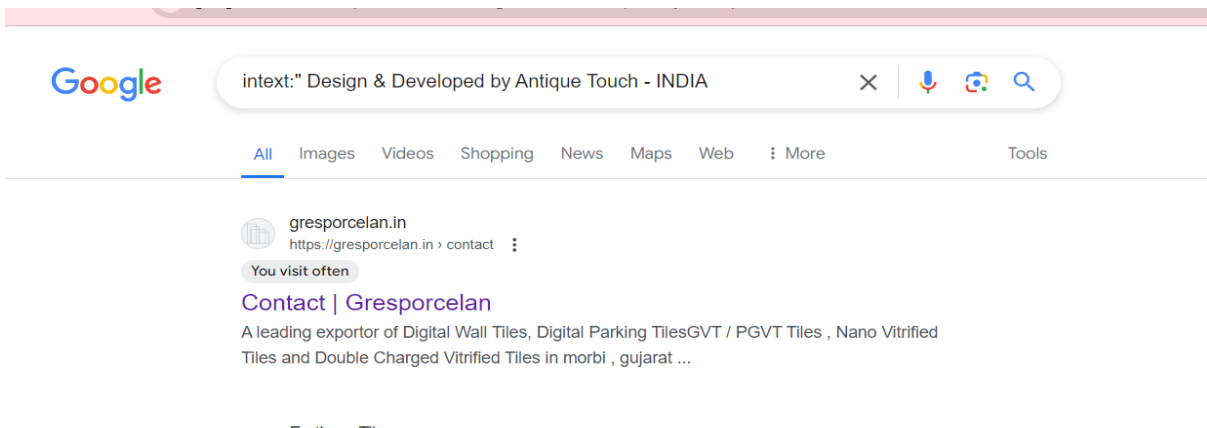
The screenshot shows the Exploit Database interface. The main content area displays a Google Dork entry with the following details:

- GHDB-ID:** 7276
- Author:** CLIFFE ZEDING
- Published:** 2021-09-22
- Google Dork Description:** intext:" Design & Developed by Antique Touch - INDIA"
- Google Search:** intext:" Design & Developed by Antique Touch - INDIA"

Below the description, there is a code block containing the following text:

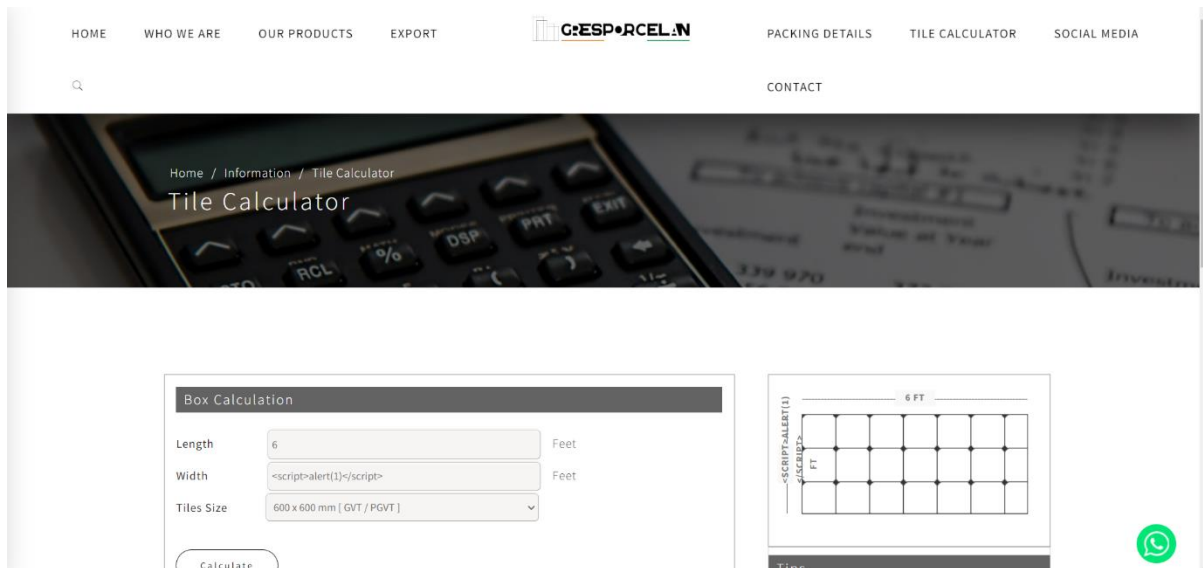
```
# Google Dork: intext:" Design & Developed by Antique Touch - INDIA"
# Sensitive Online Shopping Info
# Date: 20/07/2021
# Exploit Author: Cliffe Zeding
```

The interface also includes a sidebar with navigation icons and a bottom navigation bar with tabs for Databases, Links, Sites, and Solutions.

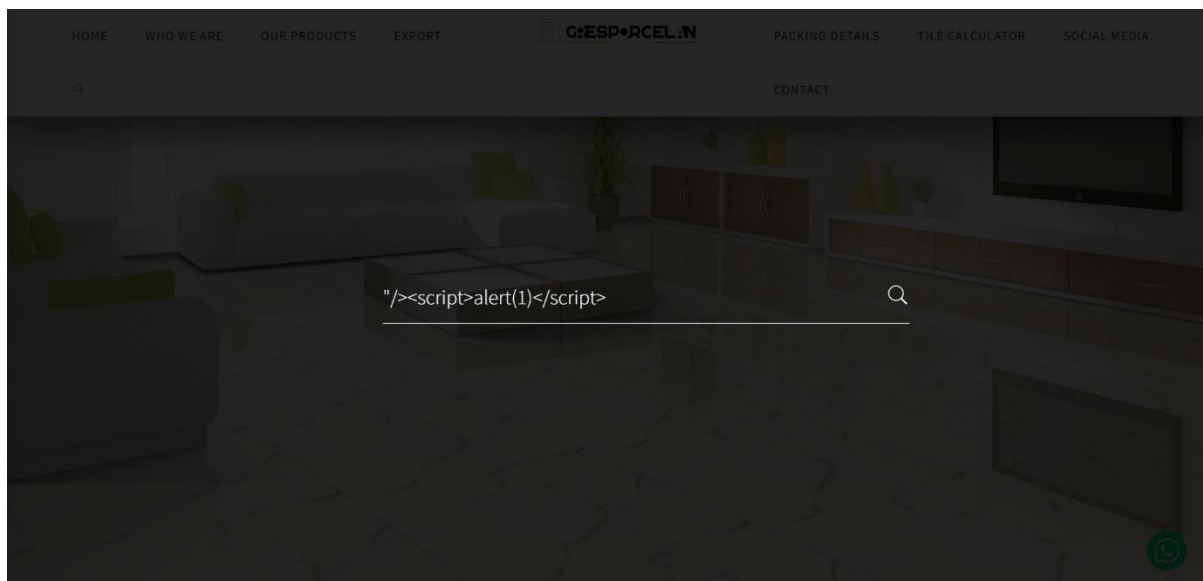


The screenshot shows the Google search results for the query "intext: Design & Developed by Antique Touch - INDIA". The search bar at the top contains the query. Below the search bar, the results are displayed under the "All" tab. The first result is from gresporcelan.in, with the URL https://gresporcelan.in/contact. The result is titled "Contact | Gresporcelan" and includes a description: "A leading exporter of Digital Wall Tiles, Digital Parking TilesGVT / PGVT Tiles , Nano Vitrified Tiles and Double Charged Vitrified Tiles in morbi , gujarat ...".

By clicking on this link



Here click on the search bar



Inject this js code to find the XSS vulnerability



Here 1 is came means the search bar is vulnerable

## SQL

Click on the link

Admin Login Page

3D character sitting on a red chair with a laptop, and the text "Login!"

User Name :

Password :

Submit Clear

Insert the sql injection in the username and password and click on submit

atjtsr.com/verify/Student.aspx

SL No.: 2071

Certificate No.:

Student Name:

Father's Name:

Date Of Birth: DD MM YYYY

Session:

Trade:

Grade:

Certificate Issue Date: DD MM YYYY

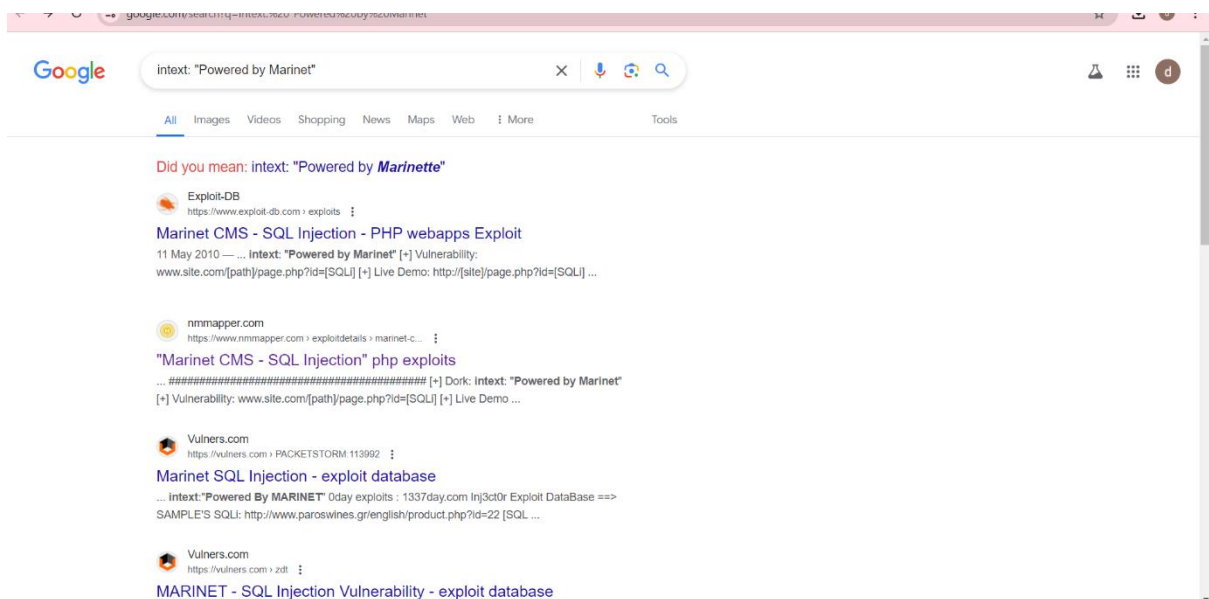
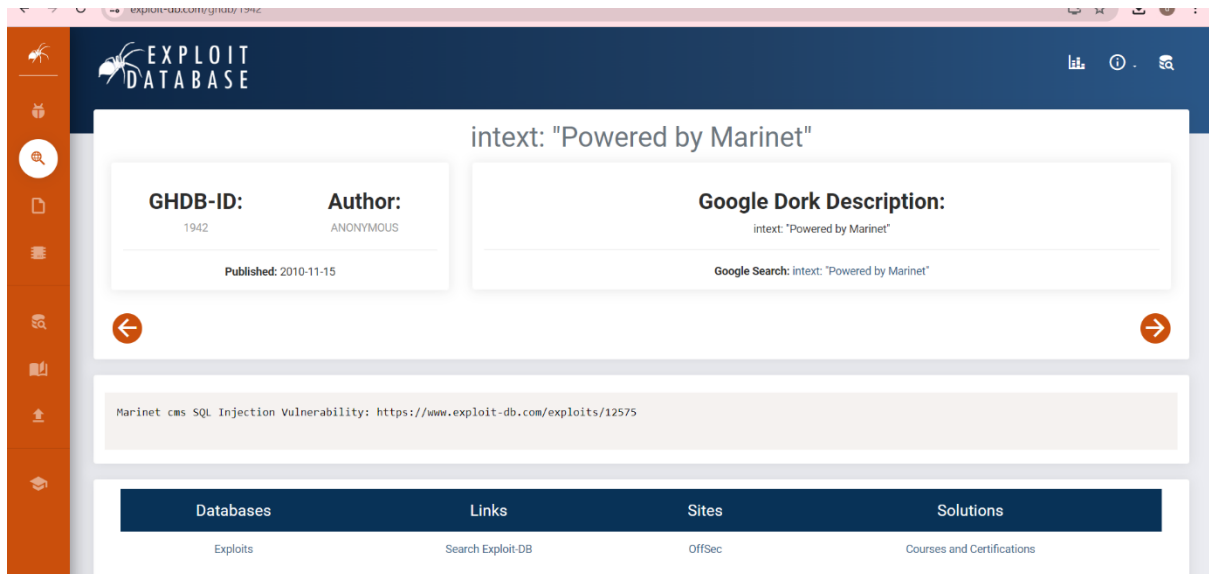
Upload Image:  No file chosen

Upload Certificate:  No file chosen

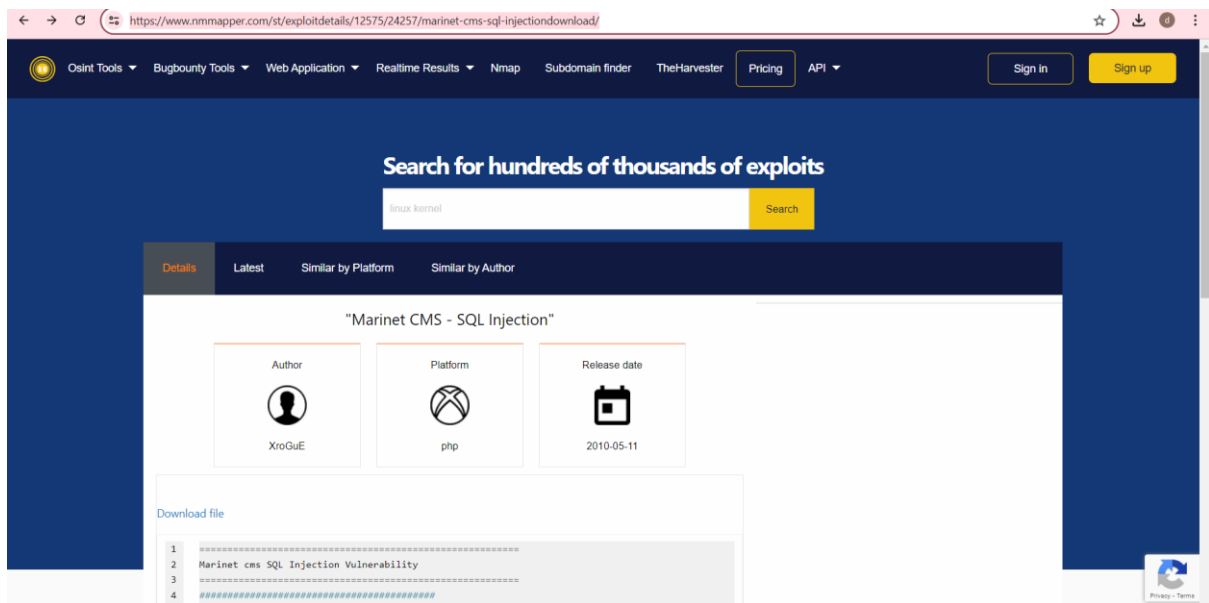
The admin page will get Log in without creating an account in it.

## CORS vulnerability

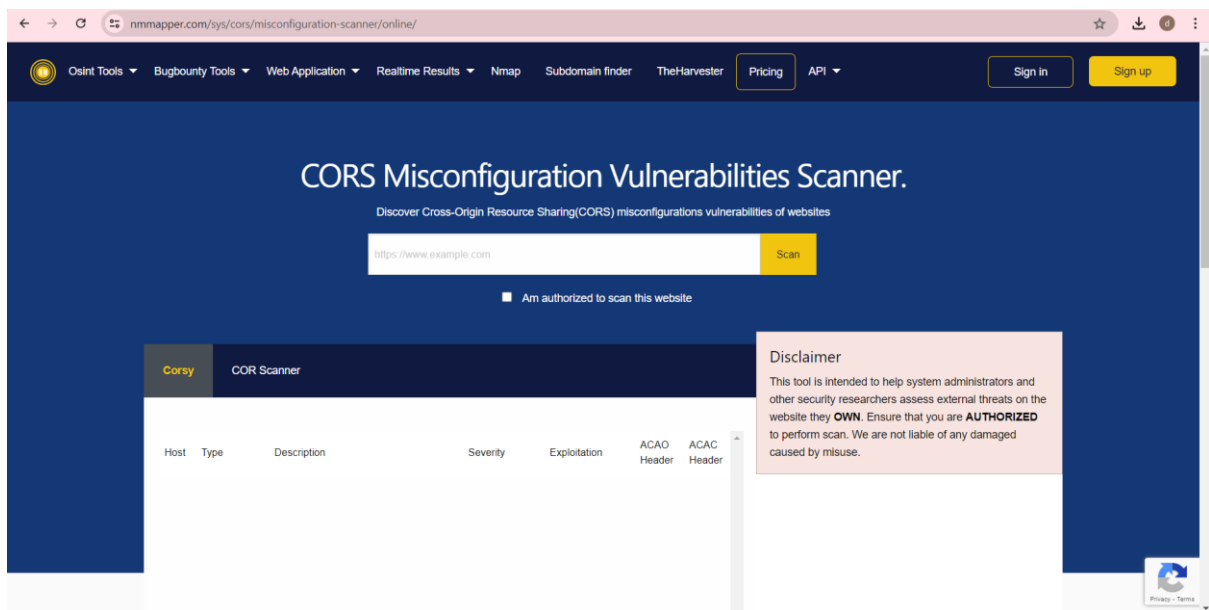
### 1) CORS vulnerability using command prompt



Here click on the web Marinet CMS



This is the main domain which will come in the “Origin: ” as shown in the command prompt



This is the subdomain which will come after curl as shown in the command prompt

```
Microsoft Windows [Version 10.0.22621.3737]
(c) Microsoft Corporation. All rights reserved.

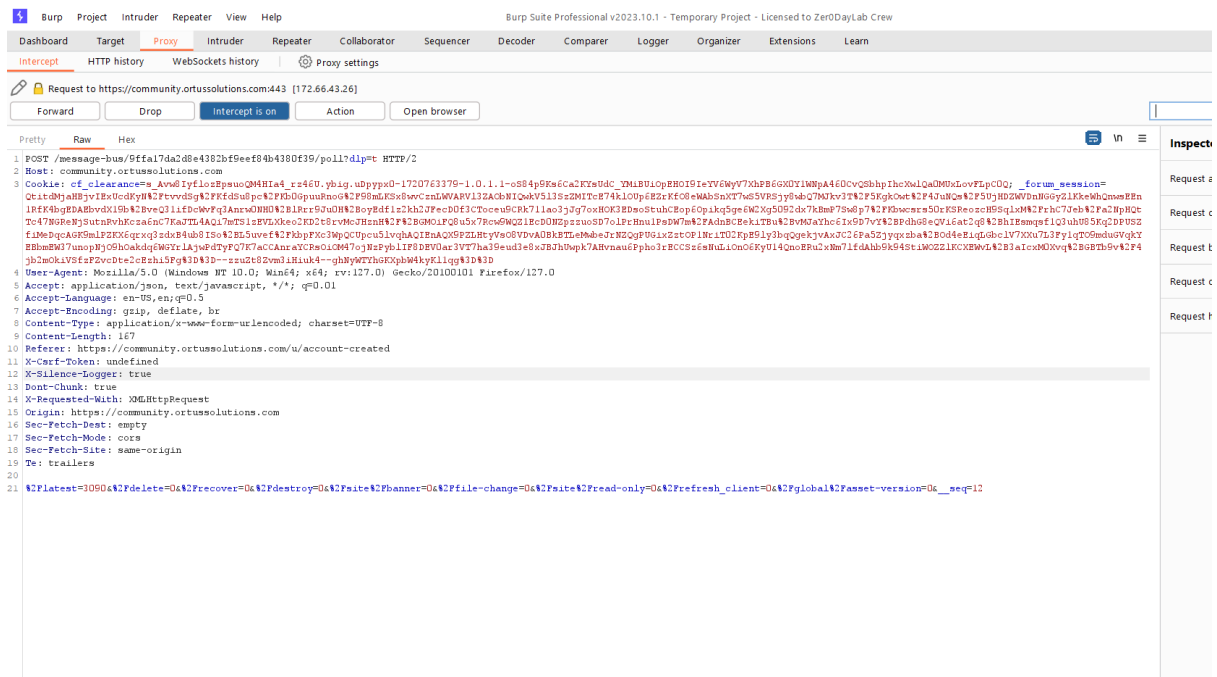
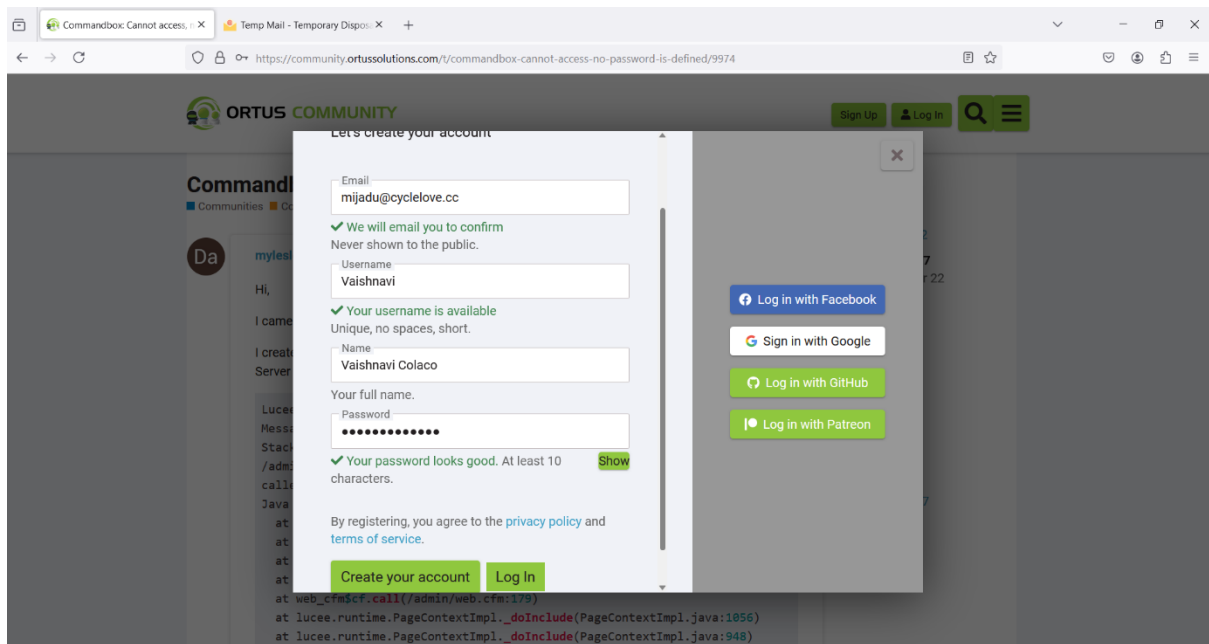
C:\Users\Vaishnavi>curl https://www.nmmapper.com/sys/cors/misconfiguration-scanner/online/ -H "Origin:https://www.nmmapper.com/st/exploitdetails/12575/24257/marinet-cms-sql-injectiondownload/" -I
HTTP/1.1 200 OK
Date: Thu, 11 Jul 2024 10:53:41 GMT
Content-Type: text/html; charset=utf-8
Connection: keep-alive
Expires: Thu, 11 Jul 2024 10:53:41 GMT
Cache-Control: max-age=0, no-cache, no-store, must-revalidate, private
Cache-Control: no-cache
Vary: Accept-Language, Cookie
Content-Language: en
X-Frame-Options: DENY
Strict-Transport-Security: max-age=15552000; includeSubDomains; preload
X-Content-Type-Options: nosniff
Referrer-Policy: same-origin
Cross-Origin-Opener-Policy: same-origin
Set-Cookie: csrftoken=r20JKEaaBlJsiJoPyJslWosyYpzTeeXm; expires=Thu, 10 Jul 2025 10:53:41 GMT; Max-Age=31449600; Path=/; SameSite=Lax; Secure
Set-Cookie: sessionId=ww76h16kinawwigae8pebcoff9jrwlwly; expires=Thu, 25 Jul 2024 10:53:41 GMT; HttpOnly; Max-Age=1209600; Path=/; SameSite=Lax; Secure
Access-Control-Allow-Origin: *
CF-Cache-Status: DYNAMIC
Report-To: [{"url":"https://a.nel.cloudflare.com/report/v4?r=wwj7e4loPkDKH0eg9LsLyGkh6AFcgoeW1SOU%2Brf%2BEMcIZd0p71vL3XHmIgf9f8gAsyLR9dBN258ULygiwJlZPHDn2Cwd722P495MpbGFUhsuirIajU5k8xstZl1idps5Z9oN"}], "group":"cf-nel", "max_age":604800}
NEL: {"success_fraction":0,"report_to":"cf-nel","max_age":604800}
Server: cloudflare
CF-RAY: 8a18404c4fc64015-BOM
alt-svc: h3=":443"; ma=86400

C:\Users\Vaishnavi>
```

Here the Access-Control-Allow-Origin: \* is their and the Report-to: link is coming

## 2)CORS Vulnerability using Burp Suite

The screenshot shows the Exploit Database website interface. The search bar at the top contains the query "intext:Dumping data for table `orders`". Below the search bar, the results are displayed in a grid. The first result is for a GHDB entry with ID 4309, authored by ANONYMOUS, published on 2016-07-07. The Google Dork Description is "intext:Dumping data for table `orders`". The Google Search result is "intext:Dumping data for table `orders`". Below the search results, there is a section titled "Dork finds SQL dump files containing personal information" by warlock72.



Here the Sec-Fetch-Mode: cors is coming



Burp Suite Professional v2023.10.1 - Temporary Project - Licensed to Zer0DayLab Crew

Dashboard Target Proxy Intruder Repeater Collaborator Sequencer Decoder Comparer Logger Organizer Extensions Learn

Send Cancel < >

Target: <https://community.ortussolutions.com> HTTP/2

**Request**

Raw Hex

```
1 POST /message-bus/5ffal7da2d8e43b2bf9ee684b4380f36/poll?dlp= HTTP/2
2 Host: community.ortussolutions.com
3 Cookie: cf_clearance=...
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:127.0) Gecko/20100101 Firefox/127.0
5 Accept: application/json, text/javascript, */*; q=0.01
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Content-Type: application/x-www-form-urlencoded; charset=UTF-8
9 Content-Length: 167
10 Referer: https://community.ortussolutions.com/u/account-created
11 X-Csrftoken: undefined
12 X-Silence-Logger: true
13 Dont-Chunk: true
14 X-Requested-With: XMLHttpRequest
15 Origin: https://community.ortussolutions.com
16 Sec-Fetch-Dest: empty
17 Sec-Fetch-Mode: cors
18 Sec-Fetch-Site: same-origin
19 Te: trailers
20
21 %2Flatest%3D%2Fdelete%3D%2Frecover%3D%2Fdestroy%3D%2Fsite%3Fbanner%3D%2Ffile-change%3D%2Fsite%3Fread-only%3D%2Frefresh_client%3D%2Fglobal%3Fasset-version%3D%3Fseq%3D
```

**Response**

Raw Hex Render

```
1 HTTP/2 200 OK
2 Date: Fri, 12 Jul 2024 05:56:01 GMT
3 Content-Type: application/json; charset=utf-8
4 Vary: Accept-Encoding
5 Cache-Control: must-revalidate, private, max-age=0
6 Pragma: no-cache
7 Expires: 0
8 Access-Control-Allow-Origin: https://community.ortussolutions.com
9 Access-Control-Allow-Methods: GET, POST
10 Access-Control-Allow-Headers: X-SILENCE-LOGGER, X-Shared-Session-Key, Dont-Chunk,
    Discourse-Prevent, Discourse-Deferred-Track-View
11 Access-Control-Max-Age: 7200
12 X-RunTime: 0.001651
13 X-Upstream: 10.112.145.28:80
14 X-Upstream-Status: 200
15 X-Upstream-Response-Time: 407600.008
16 Cf-Cache-Status: DYNAMIC
17 Report-To:
    [{"endpoint": ["https://a.nel.cloudflare.com/reports/v4?token=68e6m042rv2hg7DMF1D7qIqI
    Dyd8b35e77LW8m6g3jCU48y2142Bma3ID8N1j6xQFuehvo8n2B0ekVvvdvOVCKZV1288Goc042BRJH5C8n4g0
    2fy8m8m0UCVaoq2FovX8a0b42BArCTnx42B0wqqlIxy743D"]}, {"group": "cf-nel", "max_age": 604800}]
18 Nel: {"success_fraction": 0, "report_to": "cf-nel", "max_age": 604800}
19 Server: cloudflare
20 Cf-Ray: 8a1e5a08b7c3af5-80M
21 Alt-Svc: h3=":443"; ma=86400
22
23 [
  ]
```

Inspector

Request attributes 2

Request query parameters 1

Request body parameters 10

Request cookies 2

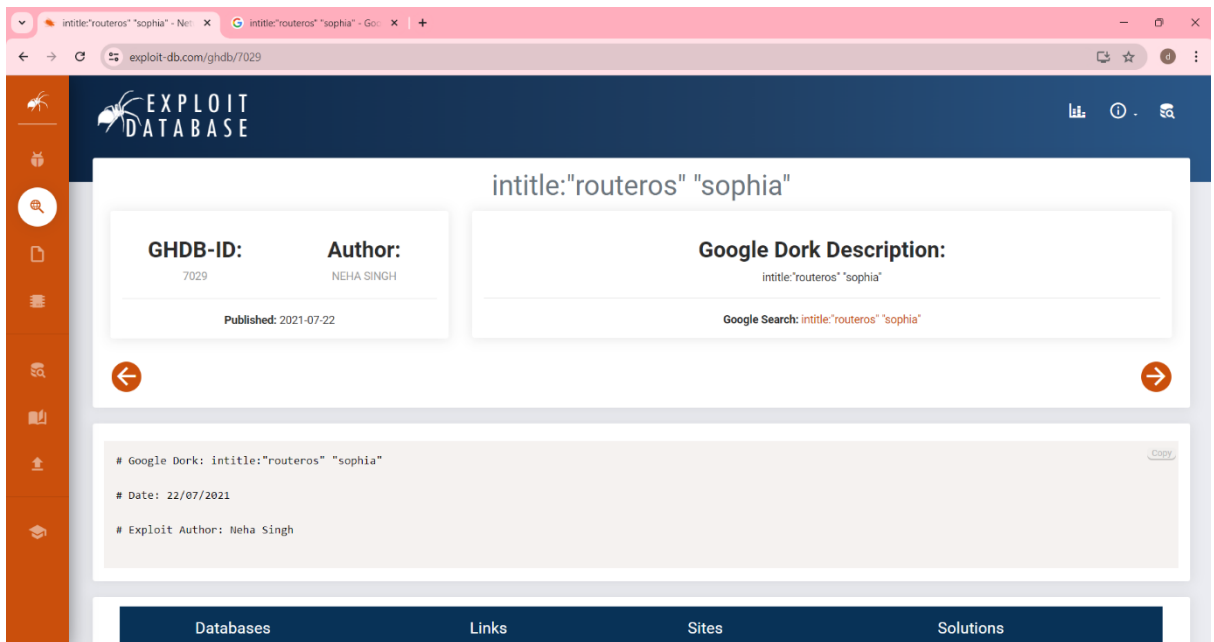
Request headers 22

Response headers 20

Done 1,050 bytes | 488 millis

Here the Access-Control-Allow-Origin: with a link as shown in the ss is there and the Report-to: link is coming. The Access-Control-Allow-Methods: GET, POST is showing in the Burp Suite

## Email Rate Limiting

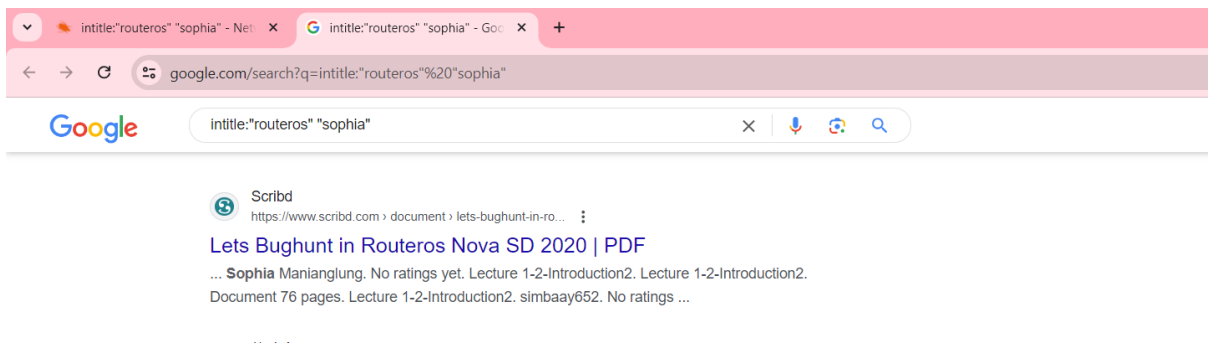


The screenshot shows the Exploit Database (GHDB) entry for the search query `intitle:"routeros" "sophia"`. The entry details include:

- GHDB-ID:** 7029
- Author:** NEHA SINGH
- Published:** 2021-07-22
- Google Dork Description:** `intitle:"routeros" "sophia"`
- Google Search:** `intitle:"routeros" "sophia"`

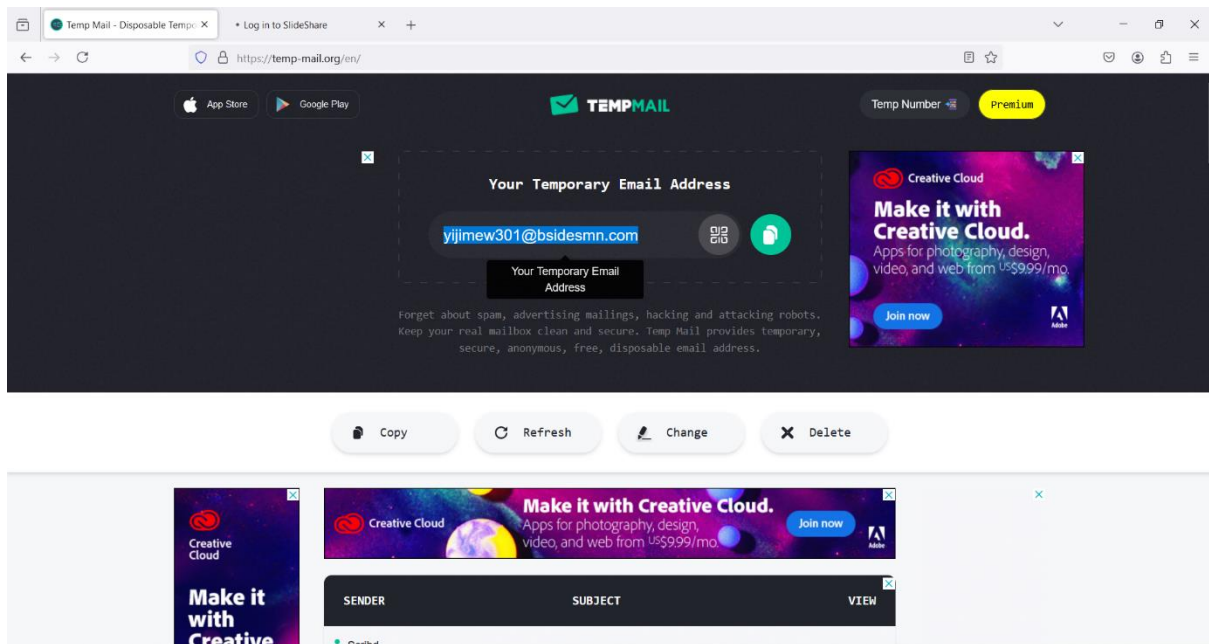
Below the entry details, there is a section for the Google Dork query, the date (22/07/2021), and the exploit author (Neha Singh). The bottom navigation bar includes links for Databases, Links, Sites, and Solutions.

## Google hacking database

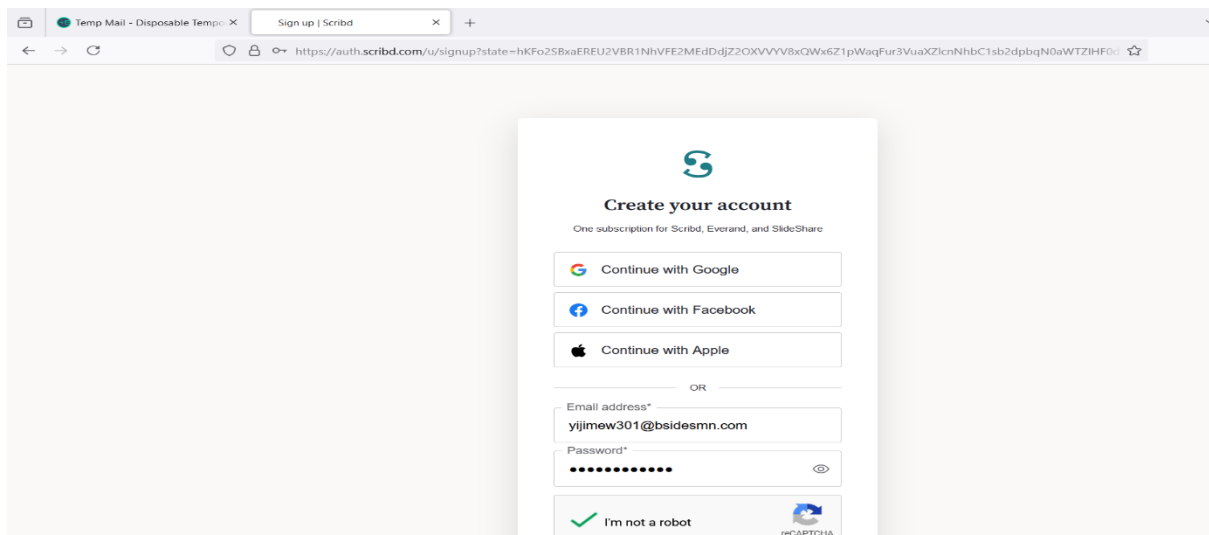


The screenshot shows a Google search result for the query `intitle:"routeros" "sophia"`. The search results include a link to a document on Scribd titled "Lets Bughunt in Routeros Nova SD 2020 | PDF". The document is 76 pages long and is authored by simbaay652. The search results also show the document's title and a brief description.

## The website is Scribd




Copy the Temp mail



Created the account on the website


Temp Mail - Disposable Temp... Sign up | Scribd


https://auth.scribd.com/u/signup?state=hKfo2SbxaEREU2VBR1NhVFE2MEdDdjZ2OXVVV8xQWx6Z1pWaqFur3VuaXZlcnNhbc1sb2dpbqN0aWTZlHF0...




## Create your account

One subscription for Scribd, Everand, and SlideShare

 Continue with Google

 Continue with Facebook

 Continue with Apple


OR


Email address\*


yijimew301@bsidesmn.com

Password\*

●●●●●●●●




 I'm not a robot



Click on Log out

Temp Mail - Disposable Temp... Log in to SlideShare

https://www.slideshare.net/login/email?from\_source=https%3A%2F%2Fwww.slideshare.net%2F%3Ffrom%3Dlogout



← Back

## Sign In with Email


Username or Email

yijimew301@bsidesmn.com

Password

Password

☐ I'm not a robot



☒ Remember me

Sign In

Forgot password?

New to SlideShare? Sign Up

Then Log in on the same website. Click on Forget password



⚡ Burp Project Intruder Repeater View Help Burp Suite Professional v2023.10.1 - Temporary Project - Licensed to Zer0DayLab Crew

Dashboard Target Proxy Intruder Repeater Collaborator Sequencer Decoder Comparer Logger Organizer Extensions Learn

1 × 2 × +

Positions Payloads Resource pool Settings

### ⓘ Payload sets

You can define one or more payload sets. The number of payload sets depends on the attack type defined in the Positions tab. Various payload types are available for each payload set, and each payload type can be configured.

Payload set: 1 Payload count: 15

Payload type: Null payloads Request count: 15

### ⓘ Payload settings [Null payloads]

This payload type generates payloads whose value is an empty string. With no payload markers configured, this can be used to repeatedly issue the base request unmodified.

☒ Generate 15 payloads

☐ Continue indefinitely

### ⓘ Payload processing

You can define rules to perform various processing tasks on each payload before it is used.

Add Edit Remove Up Down

Enabled	Rule
---------	------

### ⓘ Payload encoding

This setting can be used to URL-encode selected characters within the final payload, for safe transmission within HTTP requests.

☒ URL-encode these characters: .\^=<>?+&\*.:"'[]!@#

Add the Null payloads add 15 and do Start attack

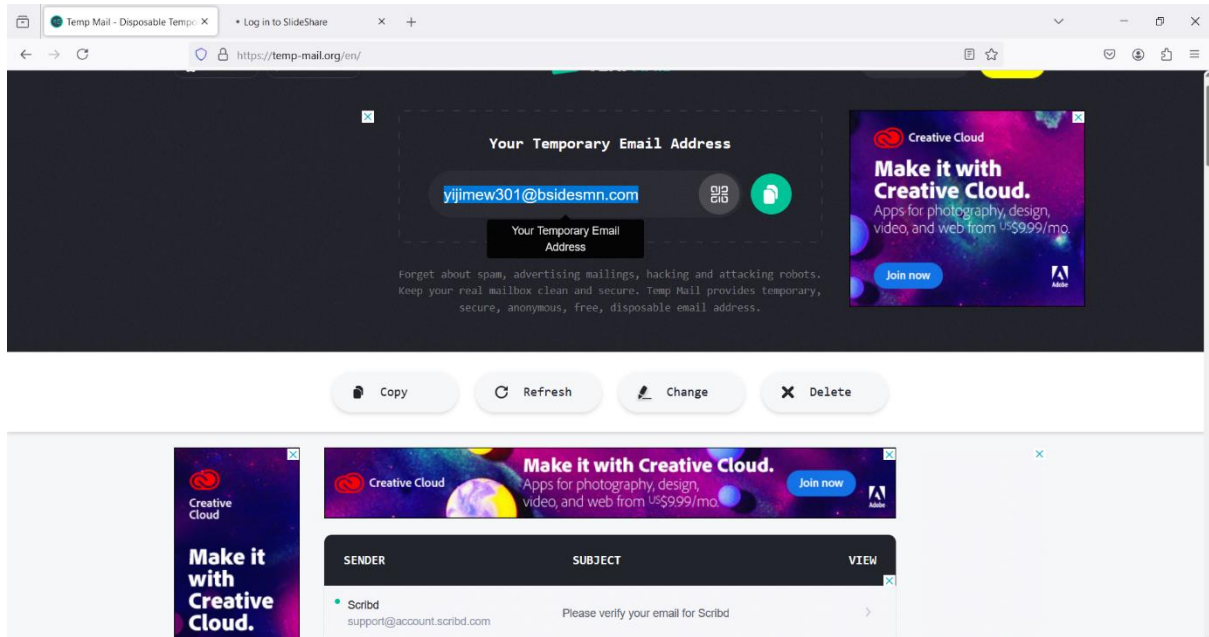
⚡ Attack Save Columns 3. Intruder attack of https://www.slideshare.net - Temporary

Results Positions Payloads Resource pool Settings

Filter: Showing all items

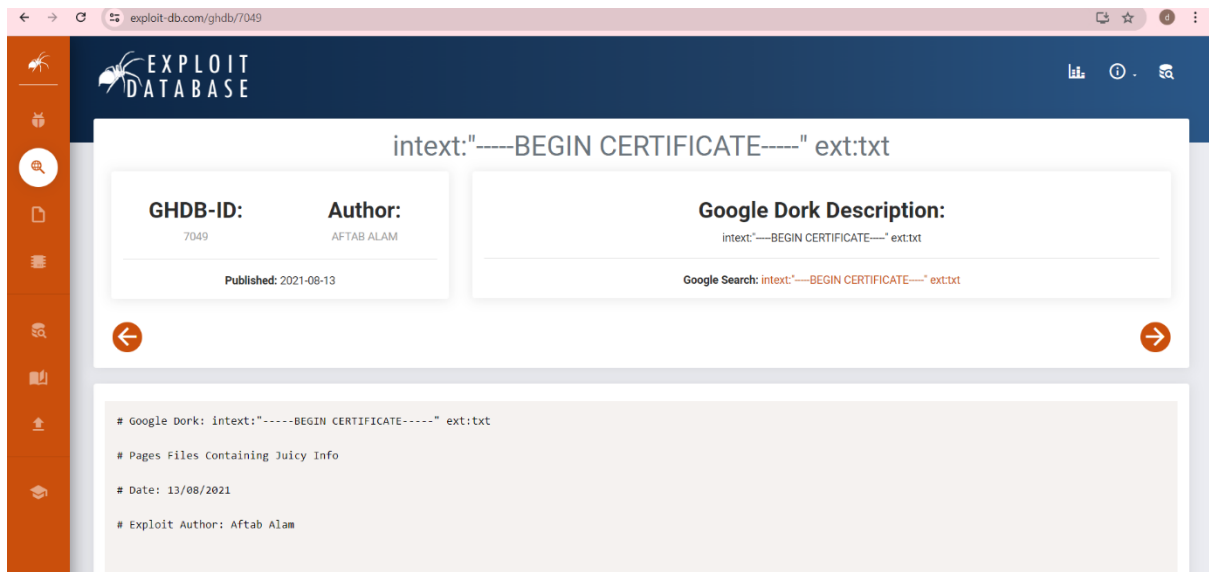
Request ^	Payload	Status code	Error	Timeout	Length	Comment
0		200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
1	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
2	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
3	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
4	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
5	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
6	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
7	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
8	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
9	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
10	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
11	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
12	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
13	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
14	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	
15	null	200	<input type="checkbox"/>	<input type="checkbox"/>	16096	

The status Code is 200



The mails will come on the inbox

## Google Dorks vulnerable sites

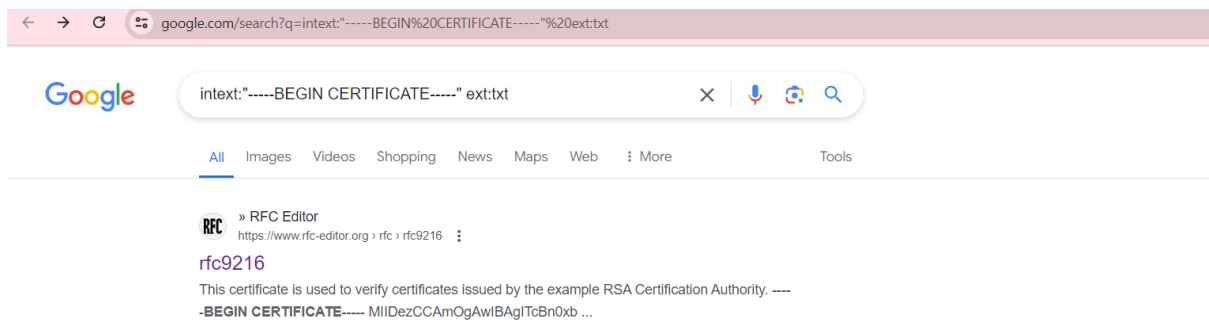


The screenshot shows the Exploit Database website. The main heading is "intext:"-----BEGIN CERTIFICATE-----" ext:txt". Below this, there are two columns of information:

GHDB-ID:	Author:	Google Dork Description:
7049	AFTAB ALAM	intext:"-----BEGIN CERTIFICATE-----" ext:txt
Published: 2021-08-13		Google Search: intext:"-----BEGIN CERTIFICATE-----" ext:txt

Below the table, there is a section with the following text:

```
# Google Dork: intext:"-----BEGIN CERTIFICATE-----" ext:txt
# Pages Files Containing Juicy Info
# Date: 13/08/2021
# Exploit Author: Aftab Alam
```



The screenshot shows a Google search result for the query "intext:"-----BEGIN CERTIFICATE-----" ext:txt". The search bar contains the query, and the results show a link to "RFC Editor" with the URL "https://www.rfc-editor.org/rfc/rfc9216". Below the link, there is a snippet of text:

**rfc9216**  
This certificate is used to verify certificates issued by the example RSA Certification Authority. -----BEGIN CERTIFICATE----- MIIDezCCAmOgAwIBAgITcBn0xb ...

Click on the link



Internet Engineering Task Force (IETF)                      D. K. Gillmor, Ed.  
Request for Comments: 9216    ACLU  
Category: Informational    April 2022  
ISSN: 2070-1721

## S/MIME Example Keys and Certificates

### Abstract

The S/MIME development community benefits from sharing samples of signed or encrypted data. This document facilitates such collaboration by defining a small set of X.509v3 certificates and keys for use when generating such samples.

### Status of This Memo

This document is not an Internet Standards Track specification; it is published for informational purposes.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Not all documents approved by the IESG are candidates for any level of Internet Standard; see Section 2 of RFC 7841.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at <https://www.rfc-editor.org/info/rfc9216>.

### Copyright Notice

Copyright (c) 2022 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (<https://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Revised BSD license text as described in Section 4.e of the

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at <https://www.rfc-editor.org/info/rfc9216>.

### Copyright Notice

Copyright (c) 2022 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (<https://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Revised BSD license text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Revised BSD License.

### Table of Contents

1. Introduction
  - 1.1. Terminology
  - 1.2. Prior Work
2. Background
  - 2.1. Certificate Usage
  - 2.2. Certificate Expiration
  - 2.3. Certificate Revocation
  - 2.4. Using the CA in Test Suites
  - 2.5. Certificate Chains
  - 2.6. Passwords
  - 2.7. Secret Key Origins
3. Example RSA Certification Authority
  - 3.1. RSA Certification Authority Root Certificate
  - 3.2. RSA Certification Authority Secret Key
  - 3.3. RSA Certification Authority Cross-Signed Certificate
4. Alice's Sample Certificates
  - 4.1. Alice's Signature Verification End-Entity Certificate
  - 4.2. Alice's Signing Private Key Material
  - 4.3. Alice's Encryption End-Entity Certificate
  - 4.4. Alice's Decryption Private Key Material
  - 4.5. PKCS #12 Object for Alice
5. Bob's Sample
  - 5.1. Bob's Signature Verification End-Entity Certificate
  - 5.2. Bob's Signing Private Key Material
  - 5.3. Bob's Encryption End-Entity Certificate
  - 5.4. Bob's Decryption Private Key Material
  - 5.5. PKCS #12 Object for Bob

To test some tooling specifically, it may be necessary to install the root CA as a "system-level" root CA.

## 2.5. Certificate Chains

In most real-world examples, X.509 certificates are deployed with a chain of more than one X.509 certificate. In particular, there is typically a long-lived root CA that users' software knows about upon installation, and the end-entity certificate is issued by an intermediate CA, which is in turn issued by the root CA.

The example end-entity certificates in this document can be used either with a simple two-link certificate chain (they are directly certified by their corresponding root CA) or in a three-link chain.

For example, Alice's encryption certificate (alice.encrypt.crt; see Section 4.3) can be validated by a peer that directly trusts the example RSA CA's root cert (ca.rsa.crt; see Section 3.1):

```
+=====+ +-----+
|| ca.rsa.crt ||-->| alice.encrypt.crt |
+=====+ +-----+
```

Figure 1: Validating Alice's encryption certificate directly when the issuing CA is a trust anchor

And it can also be validated by a peer that only directly trusts the example Ed25519 CA's root cert (ca.25519.crt; see Section 6.1) via an intermediate cross-signed CA cert (ca.rsa.cross.crt; see Section 3.3):

```
+=====+ +-----+ +-----+
|| ca.25519.crt ||-->| ca.rsa.cross.crt |-->| alice.encrypt.crt |
+=====+ +-----+ +-----+
```

Figure 2: Validating Alice's cert from a different trust anchor via an intermediate cross-signed CA certificate

By omitting the cross-signed CA certs, it should be possible to test a "transvalid" certificate (an end-entity certificate that is supplied without its intermediate certificate) in some configurations.

## 2.6. Passwords

Each secret key presented in this document is represented as a PEM-encoded PKCS #8 ([RFC5958]) object in cleartext form (it has no password).

This certificate is used to verify certificates issued by the example RSA Certification Authority.

```
-----BEGIN CERTIFICATE-----
MIIDezCCAmOgAwIBAgITcBn0xb/zdaeCQlqp6yZUAGZUCDANBgkqhkiG9w0BAQ0F
ADBVMQ0wCwYDVQQKEwRJRVRGRmREwDwYDVQQLEwhMQU1QUyBXRzExMC8GA1UEAxMo
U2FtcGx1IEExBTVBTIFJTQSB0ZDZj0aWZpY2F0aW9uIEF1dGhvcml0eTAqFw0xOTEx
MjAwNjU0MThGaG8yMDUyMDkyNzA2NTQxOFowVTENMAAGA1UEChMESAUVURjERMA8G
A1UECzMITEFNMFgV0cxMTAvBgNVBAMTKFNhbXBsZS5BMQU1QUyBSU0EgQ2VydGlm
aWNhdGlvbiBBdXR0b3JpdHkwggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIB
AQc2GGPTEFVNdi0LsiQ79A0Mz2G+LRJlBx2vNo8STibAnyQ9VzFrGJHjUhRX/Omr
OP3rDCB2SYfBPPVwd0CdC6z9qfJkcVxDc1hK+VS9vKncL0IPUYlkJwWuMpXa1Ielz
+zcUv+gjV83Uvn6wTn39MCmyu7nFPzihcuOnbMYOCdMmUbi1Dm8TX9P6itFR3hi
IHpSKMbkoXlM1837WafFx57kBioIuNjKEyPIuK9wGUAeppc5QAHJg95PPEHNLmM
yhBzCImgkyozRSeSrKxq9XeJKU94lWGaZ0zb4karCur/eiMoCk3YNNV8L3styvcMG
1qUDCAaKx6FZEF7hE9RN6L3bAgMBAAGjQjBAMAA8GA1UdEwEB/wQFMAMBAf8wDgYD
VR0PAQH/BAQDAgEGMB0GA1UdDgQWBBSRMI58BxcMp/EJKGU2GmccaHb0WTANBgkq
hkiG9w0BAQ0FAAOCAQEACDxWlJGjzKadNMPcF1ZInZC+Hl7RLrcBDR25jMCXg9yL
IwGVEcNp2fH4+YHTRTGLH81aPADMDUGHgpcfcqwjjesavt/mO0T0S0LjJ0RVm93fE
heSNUHUiGVR9njTVw2EBz7e2p+v3t0sMnunvm6PIDgHxx0W6mjzMX7lG74bJfo+v
dx+jI/aXt+iih5pi7/2Yu9eTDVu+S52wsnF89BEJeV0r+EmGDxUv47D+5KuQpKM9
U/isXpwC6K/36T8RhhdOQXDq0Mt91TZ4dJTT0m3cmo8zzcxsKMDStZH00zCBtBq
uIbwWw50A72o/Iwg9v+W0WkSBCWEadf/uK+cRicxrQ==
-----END CERTIFICATE-----
```

### 3.2. RSA Certification Authority Secret Key

This secret key material is used by the example RSA Certification Authority to issue new certificates.

```
-----BEGIN PRIVATE KEY-----
MIIE+wIBADANBgkqhkiG9w0BAQEFAASCBCBgwggSkAgEAAoIBAQC2GGPTEFVNdi0L
siQ79A0Mz2G+LRJlBx2vNo8STibAnyQ9VzFrGJHjUhRX/OmrOP3rDCB2SYfBPPVwd
0CdC6z9qfJkcVxDc1hK+VS9vKncL0IPUYlkJwWuMpXa1Ielz+zcUv+gjV83Uvn6w
Tn39MCmyu7nFPzihcuOnbMYOCdMmUbi1Dm8TX9P6itFR3hiIHpSKMbkoXlM1837
WafFx57kBioIuNjKEyPIuK9wGUAeppc5QAHJg95PPEHNLmMyhBzCImgkyozRSeS
rKxq9XeJKU94lWGaZ0zb4karCur/eiMoCk3YNNV8L3styvcMG1qUDCAaKx6FZEF7h
E9RN6L3bAgMBAAGCggEAE3tFhsm7DpgDlro+1Sk1kjbHssR4s0BHb4zrPp6c18P0
6T8gWuBcj1Dz0zykNTzaMaDxAia4vuxVJB1mberkNHZTFqyb8bx3ceSE0CT3aoyq
5fiFpR0L6Ba1vgg8RTvNCAIApHNa4pVkoXD8Wq+h7m1UA0YGBie5U08/P2qWjcOz
+zcHeyYXJS/iuu0t2/F0ihEWGcXBmoc8D++n7mKst2jkAHD4w1PN2MgVqnmagpBz
gobFNmCzyZpDS+PPTtQZ1XvdGF5Sodc+Fz+jpWun1kqxDHE4UIZzDA/HAABgORbm
aEzAysOs9ZEexeq0tqu2fPB7zF/1JKdRk4UJOUs0OQKBgQDJwonP5RwvO0sYoCiw
zuFcYtmN/hI3R3viKuxr19CH6+mvuIU85ooIHF6TiouZwhk+6+Vx7rcXds554DT4
2RbVrX/5i/MOzx8c8IIwoZJIasLz+vx8F4n6hyhV65bXN7AIBojMh2dt8tP2MZ/R
VEfsk4mNm06yKuzYAfjJziCnQCKBgQDnDH9UYUIPkq0PSvViKQFJFCB9BJPFh1d2
pIgoziw/JZz3M3W3IWU0KWG7UxS0T3xmn3IX6xmWW4vX1/088ybObZWYP0edbb61GM
T00T0S0LjJ0RVm93fEheSNUHUiGVR9njTVw2EBz7e2p+v3t0sMnunvm6PIDgHxx0W6mjzMX7lG74bJfo+v
dx+jI/aXt+iih5pi7/2Yu9eTDVu+S52wsnF89BEJeV0r+EmGDxUv47D+5KuQpKM9
U/isXpwC6K/36T8RhhdOQXDq0Mt91TZ4dJTT0m3cmo8zzcxsKMDStZH00zCBtBq
uIbwWw50A72o/Iwg9v+W0WkSBCWEadf/uK+cRicxrQ==
-----END PRIVATE KEY-----
```

### 3.2. RSA Certification Authority Secret Key

This secret key material is used by the example RSA Certification Authority to issue new certificates.

```
-----BEGIN PRIVATE KEY-----
MIIE+wIBADANBgkqhkiG9w0BAQEFAASCBCBgwggSkAgEAAoIBAQC2GGPTEFVNdi0L
siQ79A0Mz2G+LRJlBx2vNo8STibAnyQ9VzFrGJHjUhRX/OmrOP3rDCB2SYfBPPVwd
0CdC6z9qfJkcVxDc1hK+VS9vKncL0IPUYlkJwWuMpXa1Ielz+zcUv+gjV83Uvn6w
Tn39MCmyu7nFPzihcuOnbMYOCdMmUbi1Dm8TX9P6itFR3hiIHpSKMbkoXlM1837
WafFx57kBioIuNjKEyPIuK9wGUAeppc5QAHJg95PPEHNLmMyhBzCImgkyozRSeS
rKxq9XeJKU94lWGaZ0zb4karCur/eiMoCk3YNNV8L3styvcMG1qUDCAaKx6FZEF7h
E9RN6L3bAgMBAAGCggEAE3tFhsm7DpgDlro+1Sk1kjbHssR4s0BHb4zrPp6c18P0
6T8gWuBcj1Dz0zykNTzaMaDxAia4vuxVJB1mberkNHZTFqyb8bx3ceSE0CT3aoyq
5fiFpR0L6Ba1vgg8RTvNCAIApHNa4pVkoXD8Wq+h7m1UA0YGBie5U08/P2qWjcOz
+zcHeyYXJS/iuu0t2/F0ihEWGcXBmoc8D++n7mKst2jkAHD4w1PN2MgVqnmagpBz
gobFNmCzyZpDS+PPTtQZ1XvdGF5Sodc+Fz+jpWun1kqxDHE4UIZzDA/HAABgORbm
aEzAysOs9ZEexeq0tqu2fPB7zF/1JKdRk4UJOUs0OQKBgQDJwonP5RwvO0sYoCiw
zuFcYtmN/hI3R3viKuxr19CH6+mvuIU85ooIHF6TiouZwhk+6+Vx7rcXds554DT4
2RbVrX/5i/MOzx8c8IIwoZJIasLz+vx8F4n6hyhV65bXN7AIBojMh2dt8tP2MZ/R
VEfsk4mNm06yKuzYAfjJziCnQCKBgQDnDH9UYUIPkq0PSvViKQFJFCB9BJPFh1d2
pIgoziw/JZz3M3W3IWU0KWG7UxS0T3xmn3IX6xmWW4vX1/088ybObZWYP0edbb61GM
I9DoI5igndLgDwyOL2PFuZh5pqqc09DE+cpJW4nNoudqTNmCrjhmXNCGKkgJlD8z
/OkSccvywWKBgDd0ReajRUziEjDxjF2UbzKx8lZjsX4KIs22GIdHqSRCvly80Qa
5WN3ULNiyB350HCP69wDFMXym5rJoQjPvh6GIuhYKv4V8fffxkYv5kx5uWiXZVJ
7v2x+m8rMqlyv+pkYwLV8KKytHmdiBzD+oTWx7r4ueLjtaxngzx93pAoGBAKpR
rR9PnroKHubSE/drUNZFLvnZwPDv6l08T978tONL372pUT9KjR8eN31DaMpoQOpC
BqvpSoQjBLt1nDysV2krI0RwMIOzAwc0E9C8RMvJ6+RdU50Q1BSyJvLGAkI5AAHk
PTk8cGYV01BCHG1X8p3XYfw0xQaHxtuVVCv8eYgCvAoGBAIZeiVhc0YTJ0jUadz+0
vS0zA1arg5k2YCPGf7z+iJm5rbMk7jrYixD6WmJT0kVLHDsVxMBpbA7GhL7TKy5
cepBH1PvuxEiI8dqN+UoeJeBpnHo/cjJ0iCR9/aMjzi+qiUo30MDR+UH99NIdDKN
i75GRVLAew0Izgt09EMEiD9joDsw0QYKKwYBBAGSCBIIATERMCKGCWCGSAFlAwQC
AgQcpcc63HhYU7WYaawUinRQotLfwNyzMotmTati6Q==
-----END PRIVATE KEY-----
```

This is vulnerable as for a hacker its an important thing for hacking someone's data

#### 4.1. Alice's Signature Verification End-Entity Certificate

This certificate is used for verification of signatures made by Alice.

```
-----BEGIN CERTIFICATE-----
MIIDZzCCAregAwIBAgITN0EFee11f0Kpolw69PhqzpqplzANBgkqhkiG9w0BAQ0F
ADBVMQ0wCwYDVQQKEwRJRVRGRmREwDwYDVQQLEwhMQU1QUyBXRzExMC8GA1UEAxMo
U2FtcGx1IEExBTBVTIFJITQSBZDZXJ0aWZpY2F0aW9uIEF1dGhvcml0eTAwOTEx
MjAwNjU0MThaGA8yMDUyMDkyNzA2NTQxOFowOzENMA5GA1UEChMESUVURjERMA8G
A1UECxMITEFNUFMgV0cxZzAVBgNVBAMTDKFsakWN1IExvdmVsYWN1MIIBIjANBgkq
hkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAtPSJ6Fg4Fj5Nmn9PkrYo0jTkfCv4TfA/
pd0/KLpZbJ0AER0sI7Aja07B1GuMUFJeSTulamNfCwDcDkY63PQWl+DILs7GxVwX
urhYdZlaV5hcUqVackPvedDBc/3rz4D/esFfs+E7QMFtmd+K04s+A8TCNO12DRVB
DpbP4JFD9hsc8prDtpGmFk7rd0q8gqnhxBW2RZAeLqzJOMayCQtwslq7ktkNBR2w
ZX5ICjEcF1YJFhX4jrnHwp/iELGqqaNXd3/Y0pG7QFecN7836IPpdtMSiPR+peC
rhJZWLSewbWXLJe3VMvbvQjoBMpEYlaJBUIKk01zQ1Pq90njlsJLOWIDAQAB04Gv
MIGSMAAwGA1UdEwEB/wQCAAAwFwYDVR0gBBAwDjAMBgpghkgBZQMCATAMB4GA1Ud
EQQXMBWBE2FsaWN1QHNTaW11LmV4YW1wbGUwEwYDVR0lBAwwCgYIKwYBBQUHAWQw
DgYDVR0PAQH/BAQDAgBAMB0GA1UdDgQWBBS79syyLR0GEhyXrilqkBDTIGZmczAf
BgNVHSMEGDAwGBSRMI58BxcMp/EJKGU2GmccahB0WTANBgkqhkiG9w0BAQ0FAAOC
AQEAcmiNqfQ0aBpI3f+CpJDhxtuZ2P9HjQEQ+v6BdP7GKJ19naIs3BjJ0d64roA
KHAp+c284VvyVXXWJ99FMX8q2ZUQMxH+xh6oAfzcozmnd6XaVwHg4eHIjSo27PmhK
E1oAJKKhDbdbEcXL2+x1V+duGymWtaD01DZZukYr7agyHahIXRn/C9cy31wbqN
sy9xfjPQg6+DqatiQpMz9EIAe6aCHHBh0iPU7IPkazgPYgkLD59fk4PGHnYxs1F
hd06zZk9E8zwlclALGZa/iSbczisqckN3qGehD2s16jMhwFXLJtBiN+uCDgNG/D0
qyTbY4fgKieUHx/tHuzUszZxJg==
-----END CERTIFICATE-----
```

#### 4.2. Alice's Signing Private Key Material

This private key material is used by Alice to create signatures.

```
-----BEGIN PRIVATE KEY-----
MIIE+gIBADANBgkqhkiG9w0BAQEFAASCBKcwggSjAgEAAoIBAQC09InowDgWpK2a
f0+StijSNOR8K/hN8D+1078oullsk4ASvSwjsCNo7sHUA4xQU15JO6VqY18LANwO
Rjrc9BAx4MguzsbFXBe6uFh1mVpXmFxFSpUByQ+950MFz/evPgP96wV+z4TtAwW2Z
34rTiz4DxMI07XYNFUEOls/gkUP2GxzysO2kaYWTut3SryCqeHEFbZfKb4urMk4
xrIJC3CzWruS2Q0FHBb1fkgKN5wXVgkWFFiOucfCn+IQsaqpo1d3f9jSkbtAV5w3
vzfog8919MxKI9H614KuElNAtJ7BtZcs17dUy9u9COgEykrivokFQgqQ7XNDU+r3
SeOWwks7AgMBAAECggEAFKDD2DG9A1u77q3u3p2WDH3zueTtiqgaT8u8XO+jhOI/+
HzoX9e08DIJ/b/G3brwHyfh17JFvLH1zbgsn5bghJTz3r+JcZZ513srqMV8t8zjI
JEHOKC3szH8gYVKWrIgBAQOt1H9Ti8J2oKk2aymqBFr3ZXpBUCTWpEz2s3FMBUUI
qCEsAJqsdeCh+kt43X5kvAom7LC1DHiE6RKfhMEub/LGNHSwY4dmzhaG6p95FJ1h
s8HoURI2ReVpsTadaKd3KoYNc1lcfmwdZs/hFs7xmmwXKMmlonh1mzHqD1/BqeJ
Hc8MP4ueDdyVgIe/uVt1Q9NcRQbuokkDyDYMYV6hzQKBgQD75ahYGFgZznRKtSE3
w/2rUqTYIWxx2PQz5G58PcsTzM89Hj4aZ0oLmudHbrTQHluRNcHoXEI62rs0cVPs
D7ILZOLfs+SSTeNEXxD57mjyufpV650cNc1mSJAmMX2jWQ8ndnOuWPcc5J6fNvT
au0a7ZB0aeKHnA8XXL3GYi1M9QKBgQC35xKi7f2JmGtsYY21tfRuDuM6EjhMW6b7
GwnI9IXF8TGj15s7oDEYvqSPTJdB6PAB/tZwdbj9mB4qj176x1kB/N7G097408UP
/PdHkU7duyf5nRq1mrI+yGFHVsgD313rc+akYdKcC207e6IRMST1ZFoznC6qNgpi
nNTuDz4ZbwKBgA5Dd9/dKKm77gvY690bjn6oBFuUs05VaaaS1csFOL2VZMLCNqQJ
+NLfZ7k8xJJQVcEIOT2uE7X/csBKdoUUCnL5nnsqVZQPQwI5G937KQgugy1MZLte
WmFX1X/w5qzKXtWr3ox9JPFzveSfs1bqZBi1QQmfp0skhBo/jyNvpYUNAoGAMNkw
GhcdQW87GY7QFXQ/ePwOmV491grCT/BwKPKDk1815Zgvl/ddEzWQGH/XraoyHT2T
uEuM18+QM73hflT26RBCHGXK1CUMMZL+fAQc7sjH1YX1kleFASg4rrprcrKqoR+KB
YSIayNhAK4yrf+WN66C8VPknB7us0L1TEbAOAECgYEAtwRiiQwk3B1lqENFypyc8
0Q1pxp3U7ciHi8mni0kNcTqe57Y/2o8nY9ISnt1GffMs79YQfRXTRdEm2St6oChI
9Cv5j74LHZXkgEVf02Nq/uwSzTZkePk+HoPJ04WtAdokZgRAyyH10gEae8R189e
yBX7dutONALjRZFTrg18CuegOza5BgorBgEEAZIIEggBMSswKQYJYIZIAWUDBAIC
BBySyJ1DMNPY4x1P3pudD+bp/BQhQd11pF5bQ28F
-----END PRIVATE KEY-----
```

