

```
https.ext - Notepad
File Edit Format View Help
authorityKeyIdentifier=keyid,issuer
basicConstraints=CA:FALSE
keyUsage = digitalSignature, nonRepudiation, keyEncipherment,
dataEncipherment
subjectAltName = @alt_names

[alt_names]
DNS.1 = localhost
DNS.2 = informatika.dev
```

```
C:\Windows\system32\cmd.exe

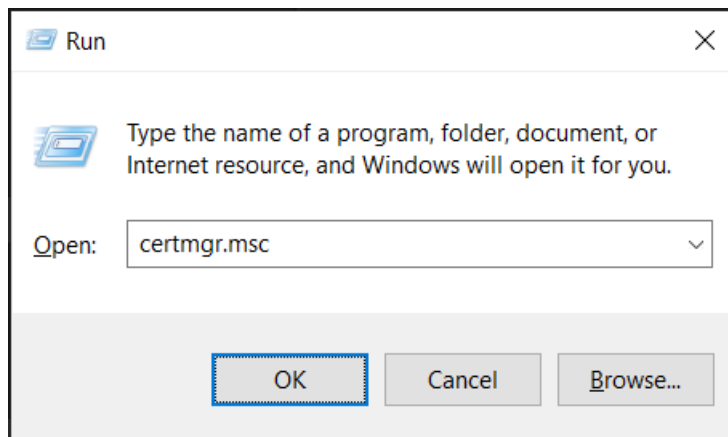
E:\laragon\etc\ssl>openssl genrsa -out server.key 2048
Generating RSA private key, 2048 bit long modulus (2 primes)
.....+++++
.....+++++
e is 65537 (0x010001)

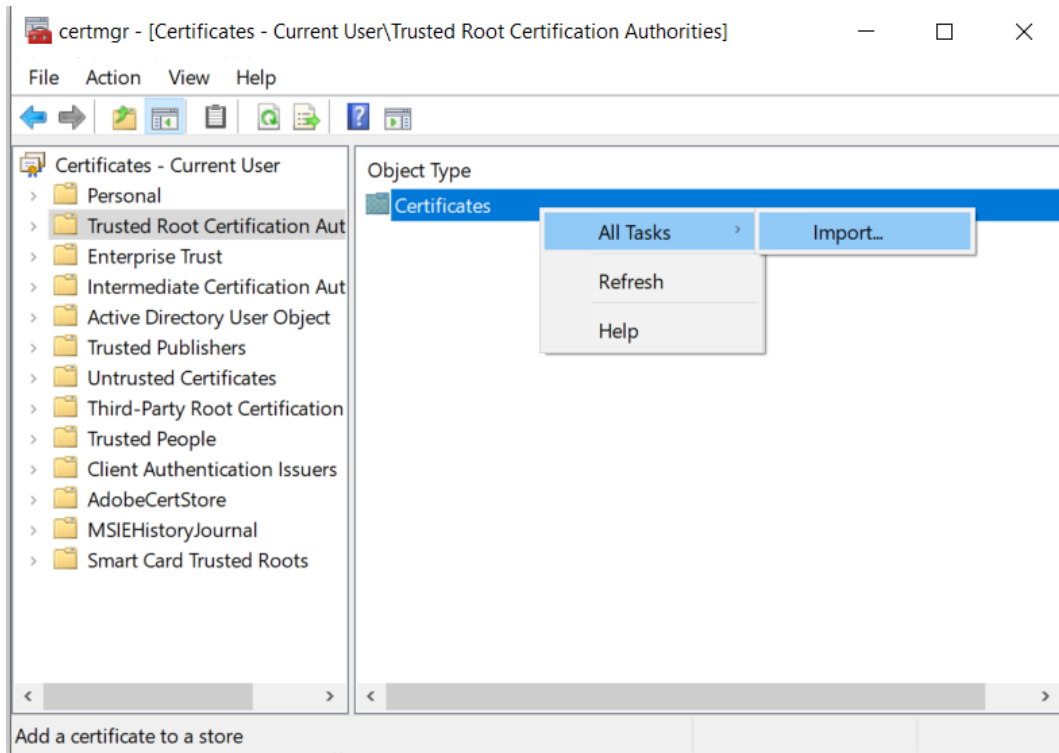
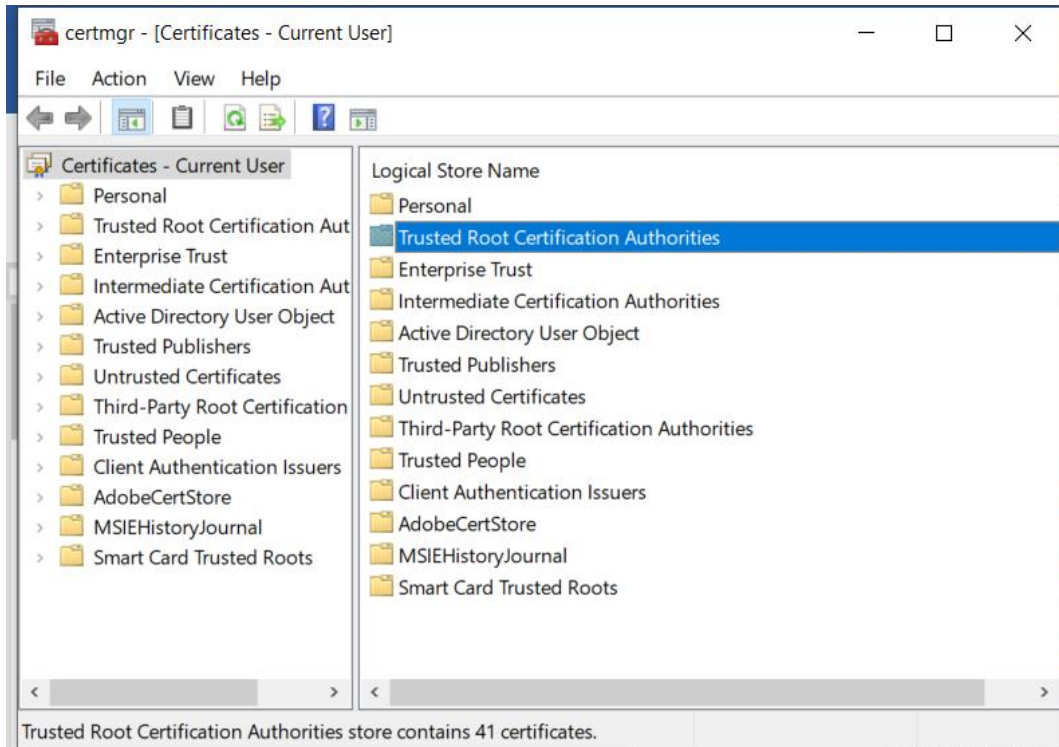
E:\laragon\etc\ssl>openssl req -new -key server.key -out server.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:
```

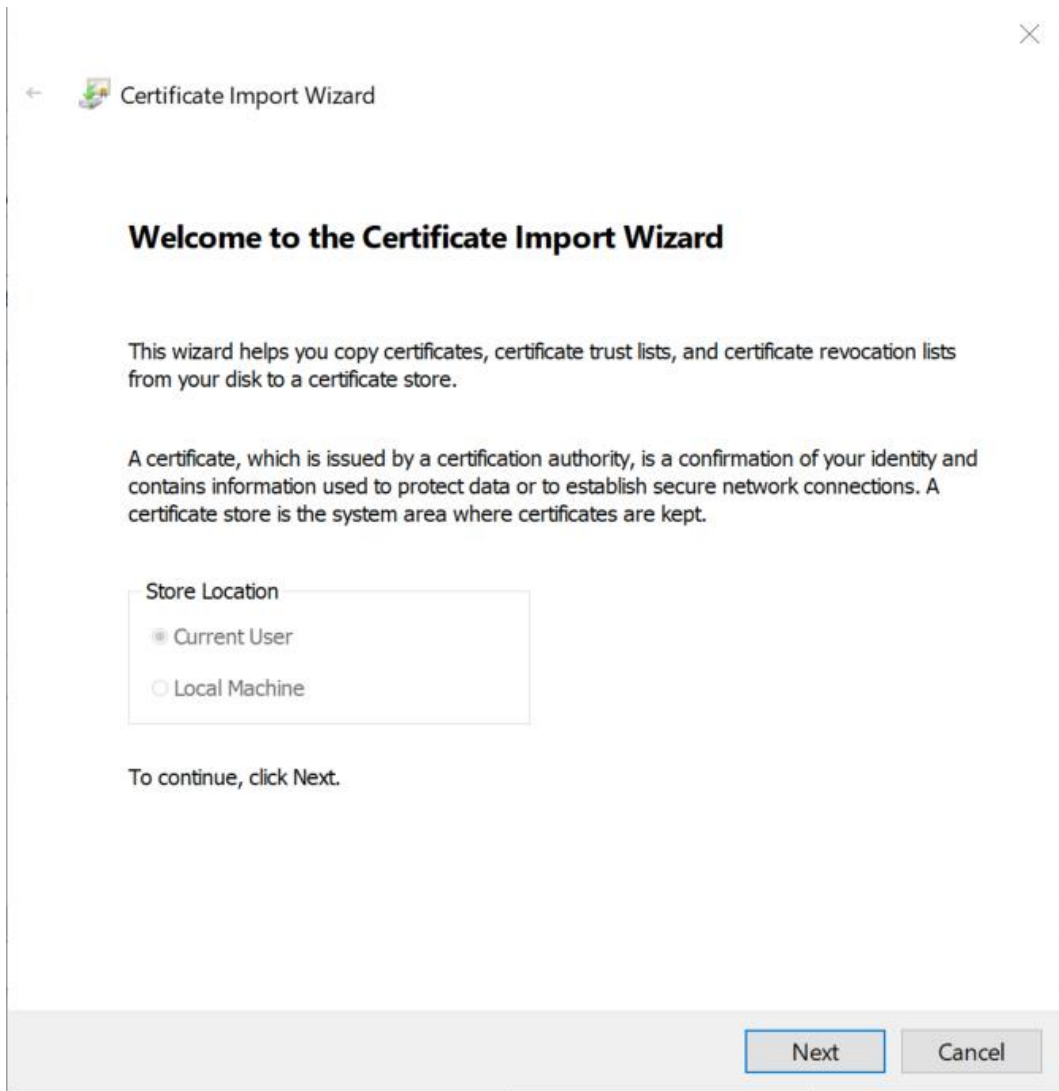
```
E:\laragon\etc\ssl\makecert.bat - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ? X
php.ini x makecert.bat x
1 openssl x509 -in server.csr -out server.crt -req -signkey server.key -days 500
-sha256 -extfile https.ext
```


```
E:\laragon\etc\ssl>openssl req -new -key server.key -out server.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:ID
State or Province Name (full name) [Some-State]:Pontianak
Locality Name (eg, city) []:Kalimantan Barat
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Politeknik Negeri Pontianak
Organizational Unit Name (eg, section) []:Informatika
Common Name (e.g. server FQDN or YOUR name) []:localhost
Email Address []:orminela@gmail.com

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:localhost
```







←  Certificate Import Wizard ×

File to Import
Specify the file you want to import.

File name:

Note: More than one certificate can be stored in a single file in the following formats:

- Personal Information Exchange- PKCS #12 (.PFX,.P12)
- Cryptographic Message Syntax Standard- PKCS #7 Certificates (.P7B)
- Microsoft Serialized Certificate Store (.SST)



←  Certificate Import Wizard

Certificate Store

Certificate stores are system areas where certificates are kept.

Windows can automatically select a certificate store, or you can specify a location for the certificate.

- Automatically select the certificate store based on the type of certificate
- Place all certificates in the following store

Certificate store:

Trusted Root Certification Authorities

Browse...

Next

Cancel



Completing the Certificate Import Wizard

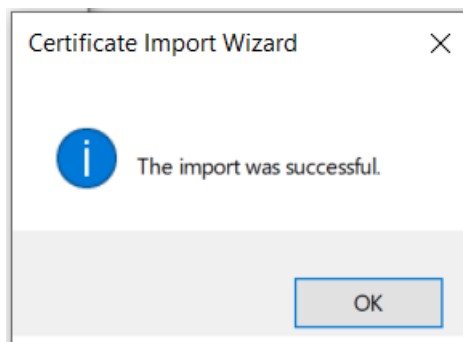
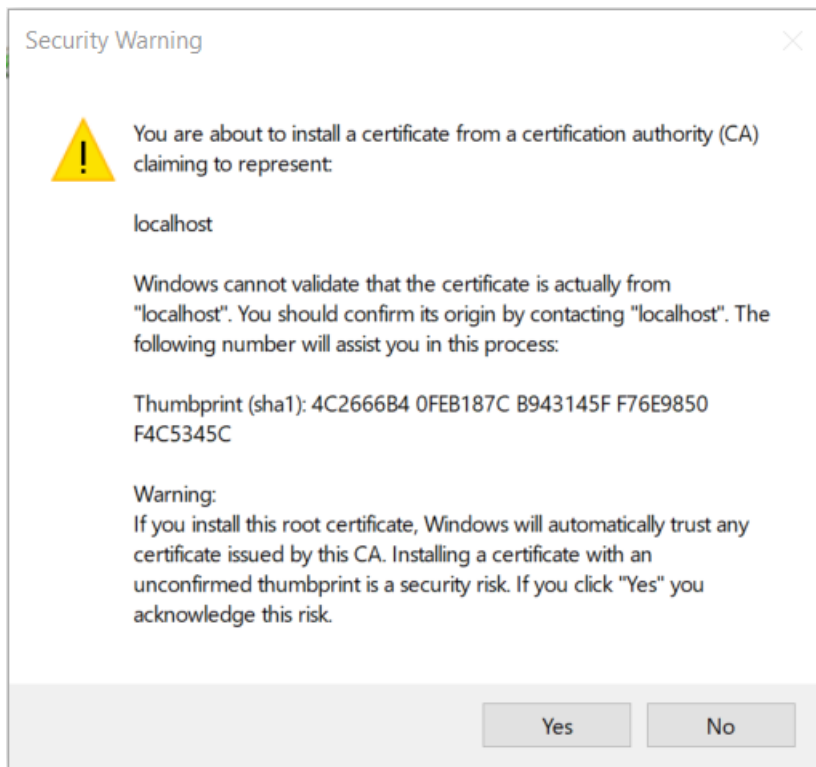
The certificate will be imported after you click Finish.

You have specified the following settings:

Certificate Store Selected by User	Trusted Root Certification Authorities
Content	Certificate
File Name	E:\laragon\etc\ssl\server.crt

Finish

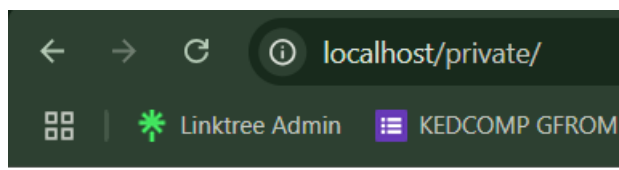
Cancel



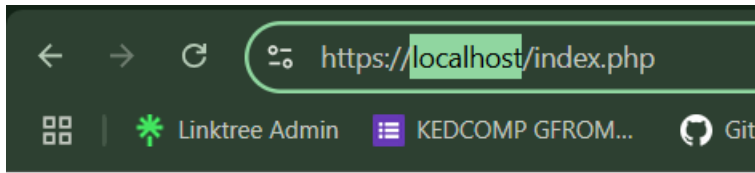
```
E:\laragon\etc\apache2\sites-enabled\00-default.conf - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
php.ini makecert.bat server.key 00-default.conf
24 # match a ServerName or ServerAlias in any <VirtualHost> block.
25 #
26 #
27 # First Virtual Host must be a shallow duplicate of the main host
28 # in httpd.conf
29 <VirtualHost 127.0.0.1:80>
30     <Directory "E:/laragon/www/public">
31         ServerName informatika.dev
32         ServerAlias www.informatika.dev
33     </Directory>
34 </VirtualHost>
35 #
36 #
37 <VirtualHost 127.0.0.1:443>
38     DocumentRoot "C:/xampp/htdocs/private"
39     ServerName informatika.dev
40     ServerAlias www.informatika.dev
41     SSLEngine on
42     SSLCertificateFile "C:/xampp/apache/conf/ssl.crt/server.crt"
43     SSLCertificateKeyFile "C:/xampp/apache/conf/ssl.key/server.key"
44     <Directory "C:/xampp/htdocs/private">
45         Options All
46         AllowOverride All
47         Require all granted
48     </Directory>
49 </VirtualHost>
length: 1.510 lines: 49 Ln: 27 Col: 66 Sel: 0 | 0 Windows (CR LF) UTF-8 INS
```

```
E: > laragon > www > private > index.php
1 <?php
2     echo "Akses 127.0.0.1:443". "</br>";
3     echo "Folder: private";
4 ?>
```

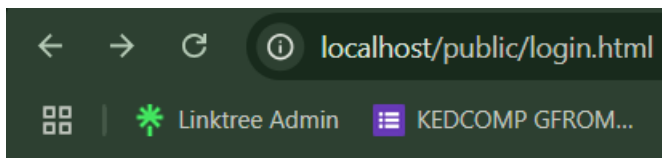
```
E: > laragon > www > public > index.php
1 <?php
2     echo "Akses 127.0.0.1:80". "</br>";
3     echo "Folder: Publik";
4 ?>
```



Akses 127.0.0.1:443
Folder: private



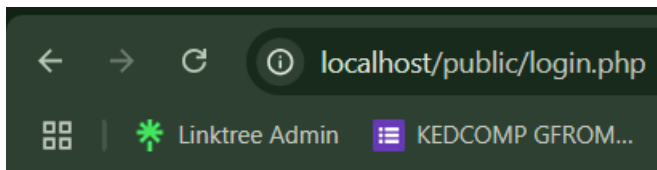
Akses 127.0.0.1:443
Folder: private



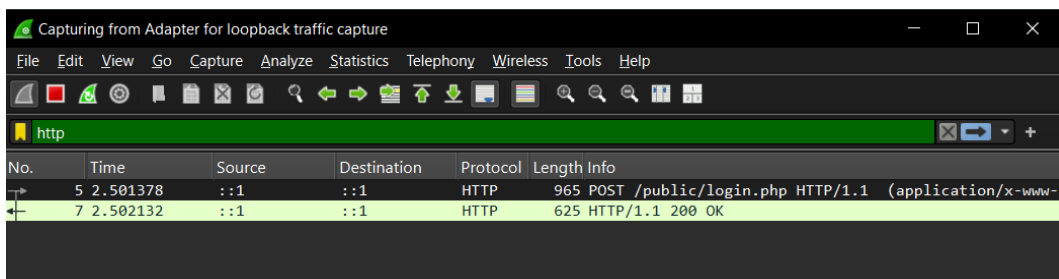
Login Page Public

Username:

Password:



Login successful!
Username: 3202216065
Password: 123



Wireshark · Packet 17 · Adapter for loopback traffic capture

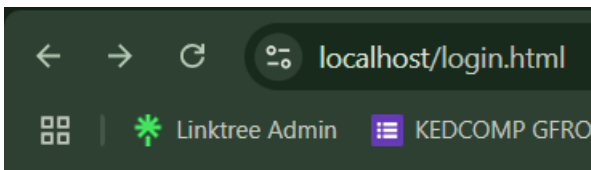
- ▶ Frame 17: 966 bytes on wire (7728 bits), 966 bytes captured (7728 bits) on interface Null/Loopback
- ▶ Internet Protocol Version 6, Src: ::1, Dst: ::1
- ▶ Transmission Control Protocol, Src Port: 58577, Dst Port: 80, Seq: 1, Ack: 1, Window: 0
- ▶ Hypertext Transfer Protocol
- ▼ HTML Form URL Encoded: application/x-www-form-urlencoded
 - ▶ Form item: "username" = "3202216065"
 - ▶ Form item: "password" = "123"

0000	18 00 00 00 60 0f ce 25	03 9a 06 80 00 00 00 00% ..
0010	00 00 00 00 00 00 00 00	00 00 00 01 e4 d1 00 50P
0020	86 4f 89 69 20 ea 07 07	50 18 27 f6 4a e8 00 00	.O.i ... P.'J...
0030	50 4f 53 54 20 2f 70 75	62 6c 69 63 2f 6c 6f 67	POST /public/login.php HTTP/1.1
0040	69 6e 2e 70 68 70 20 48	54 54 50 2f 31 2e 31 0d	Host: localhost
0050	0a 48 6f 73 74 3a 20 6c	6f 63 61 6c 68 6f 73 74	Connection: keep-alive
0060	0d 0a 43 6f 6e 6e 65 63	74 69 6f 6e 3a 20 6b 65	Content-Length: 32
0070	65 70 2d 61 6c 69 76 65	0d 0a 43 6f 6e 74 65 6e	Cache-Control: max-age=0
0080	74 2d 4c 65 6e 67 74 68	3a 20 33 32 0d 0a 43 61	sec-ch-ua: "Google Chrome";v="137", "Chromium";v="137",
0090	63 68 65 2d 43 6f 6e 74	72 6f 6c 3a 20 6d 61 78	
00a0	2d 61 67 65 3d 30 0d 0a	73 65 63 2d 63 68 2d 75	
00b0	61 3a 20 22 47 6f 6f 67	6c 65 20 43 68 72 6f 6d	
00c0	65 22 3b 76 3d 22 31 33	37 22 2c 20 22 43 68 72	
00d0	6f 6d 69 75 6d 22 3b 76	3d 22 31 33 37 22 2c 20	
00e0			

No.: 17 · Time: 9.849243 · Source: ::1 · Destination: ::1 · Proto: TCP · Length: 966 · Info: /public/login.php HTTP/1.1 (application/x-www-form-urlencoded)

Show packet bytes Layout: Vertical (Stacked)

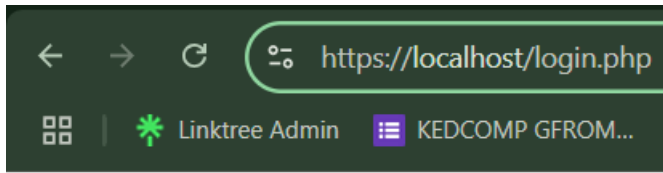
Close Help



Login Page Private

Username:

Password:



Login successful!
Username: pcnqwyt
Password: 123456789

No.	Time	Source	Destination	Protocol	Length	Info
154	38.737719	:::1	:::1	TCP	64	60461 → 443 [ACK] Seq=2 Ack=25
155	38.737879	:::1	:::1	TCP	64	443 → 60461 [FIN, ACK] Seq=25 A
156	38.737899	:::1	:::1	TCP	64	60461 → 443 [ACK] Seq=2 Ack=26
161	41.986042	:::1	:::1	TLSv1.2	88	Application Data
162	41.986082	:::1	:::1	TCP	64	60460 → 443 [ACK] Seq=917 Ack=3
163	41.986201	:::1	:::1	TCP	64	443 → 60460 [FIN, ACK] Seq=363
164	41.986222	:::1	:::1	TCP	64	60460 → 443 [ACK] Seq=917 Ack=3
269	74.296154	:::1	:::1	TCP	64	60461 → 443 [FIN, ACK] Seq=2 Ac
270	74.296241	:::1	:::1	TCP	64	443 → 60461 [ACK] Seq=26 Ack=3
271	74.296429	:::1	:::1	TCP	64	60460 → 443 [FIN, ACK] Seq=917
272	74.296482	:::1	:::1	TCP	64	443 → 60460 [ACK] Seq=364 Ack=9

Wireshark · Packet 161 · Adapter for loopback traffic capture

- ▶ Frame 161: 88 bytes on wire (704 bits), 88 bytes captured (704 bits) on inter
- ▶ Null/Loopback
- ▶ Internet Protocol Version 6, Src: :::1, Dst: :::1
- ▶ Transmission Control Protocol, Src Port: 443, Dst Port: 60460, Seq: 339, Ack:
- ▶ Transport Layer Security
 - ▼ TLSv1.2 Record Layer: Application Data Protocol: Hypertext Transfer Protocol
 - Content Type: Application Data (23)
 - Version: TLS 1.2 (0x0303)
 - Length: 19
 - Encrypted Application Data: 7493544bf758ee9231b7654f07befd77d13131
 - [Application Data Protocol: Hypertext Transfer Protocol]

```
0000  18 00 00 00 60 07 69 78 00 2c 06 80 00 00 00 00  .....ix ,.....
0010  00 00 00 00 00 00 00 00 00 00 00 01 00 00 00 00  .....
0020  00 00 00 00 00 00 00 00 00 00 00 01 01 bb ec 2c  .....
0030  55 95 c1 a7 2d 6d 34 9f 50 18 27 f2 ba 3f 00 00  U...-m4 P'...?..
0040  17 03 03 00 13 74 93 54 4b f7 58 ee 92 31 b7 65  ....tTKX..1.e
0050  4f 07 be fd 77 d1 31 31                          O..w.11
```

No.: 161 · Time: 41.986042 · Source: :::1 · Destination: :::1 · Protocol: TLSv1.2 · Length: 88 · Info: Application Data

Show packet bytes Layout: Vertical (Stacked)

Close Help

