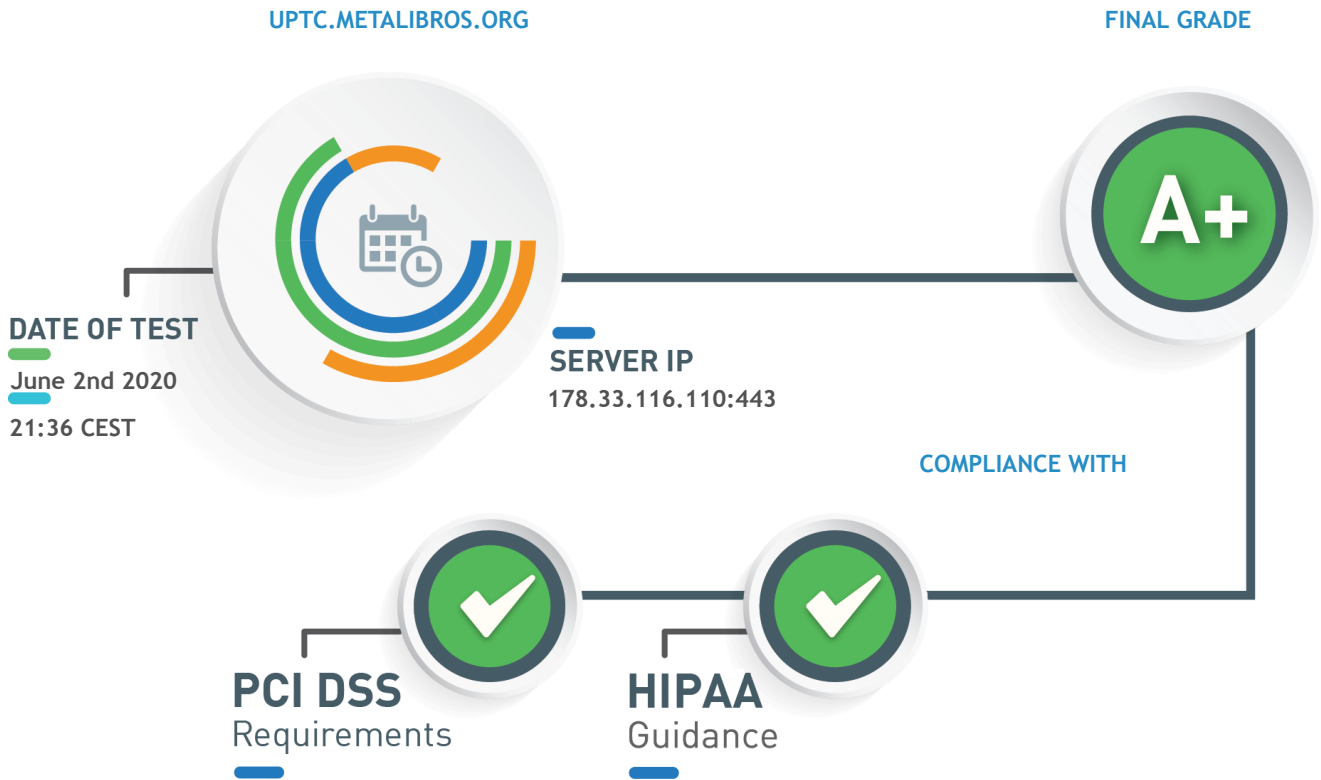


Test SSL/TLS implementation of any service on any port for compliance with PCI DSS requirements, HIPAA guidance and NIST guidelines.



## Summary of [uptc.metalibros.org:443](https://uptc.metalibros.org:443) (HTTPS) SSL Security Test

The server configuration supports only TLSv1.2 protocol, precluding users with older browsers from accessing your website.

Information

# SSL Certificate Analysis

## RSA CERTIFICATE INFORMATION

<b>Issuer</b>	Let's Encrypt Authority X3
<b>Trusted</b>	Yes
<b>Common Name</b>	uptc.metalibros.org
<b>Key Type/Size</b>	RSA 2048 bits
<b>Signature Algorithm</b>	sha256WithRSAEncryption
<b>Subject Alternative Names</b>	DNS:libros-uptc.metabiblioteca.com.co, DNS:uptc.metalibros.org
<b>Transparency</b>	Yes
<b>Validation Level</b>	DV
<b>CRL</b>	No
<b>OCSP</b>	http://ocsp.int-x3.letsencrypt.org
<b>OCSP Must-Staple</b>	No
<b>Supports OCSP Stapling</b>	Yes
<b>Valid From</b>	May 6th 2020, 16:42 CEST
<b>Valid To</b>	August 4th 2020, 16:42 CEST

## CERTIFICATE CHAIN

### DST Root CA X3

Self-signed

Root CA

Key Type/Size	<b>RSA 2048 bits</b>
Signature Algorithm	<b>sha1WithRSAEncryption</b>
SHA256	<b>0687260331a72403d909f105e69bcf0d32e1bd2493ffc6d9206d11bcd6770739</b>
PIN	<b>Vjs8r4z+80wjNcr1YKepWQboSIRi63WsWXhIMN+eWys=</b>
Expires in	<b>485 days</b>

### ↳ Let's Encrypt Authority X3

Intermediate CA

Key Type/Size	<b>RSA 2048 bits</b>
Signature Algorithm	<b>sha256WithRSAEncryption</b>
SHA256	<b>25847d668eb4f04fdd40b12b6b0740c567da7d024308eb6c2c96fe41d9de218d</b>
PIN	<b>YLh1dUR9y6Kja30RrAn7JKnbQG/uEtLMkBgFF2Fuihg=</b>
Expires in	<b>288 days</b>

### ↳ uptc.metalibros.org

Server certificate

Key Type/Size	<b>RSA 2048 bits</b>
Signature Algorithm	<b>sha256WithRSAEncryption</b>

SHA256

94c4c27291d3137dedcb0591ee389cbfad5e508e2d9dbc8bb71d65babee835a8

PIN

DnCabazPvq3vurv7LivHtnUz8IEtYW0+HlpRk4uo630=

Expires in

63 days

# Test For Compliance With PCI DSS Requirements

Reference: PCI DSS 3.1 - Requirements 2.3 and 4.1

## CERTIFICATES ARE TRUSTED

All the certificates provided by the server are trusted.

Good configuration

## SUPPORTED CIPHERS

List of all cipher suites supported by the server:

### TLSV1.2

TLS\_DHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

Good configuration

TLS\_DHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384

Good configuration

TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

Good configuration

TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384

Good configuration

## SUPPORTED PROTOCOLS

List of all SSL/TLS protocols supported by the server:

TLSv1.2

Good configuration

## DIFFIE-HELLMAN PARAMETER SIZE

Diffie-Hellman parameter size: 2048 bits

Good configuration

## SUPPORTED ELLIPTIC CURVES

List of all elliptic curves supported by the server:

P-256 (prime256v1) (256 bits)

Good configuration

## POODLE OVER TLS

The server is not vulnerable to POODLE over TLS.

Not vulnerable

## GOLDENDOODLE

The server is not vulnerable to GOLDENDOODLE.

Not vulnerable

## ZOMBIE POODLE

The server is not vulnerable to Zombie POODLE.

Not vulnerable

## SLEEPING POODLE

The server is not vulnerable to Sleeping POODLE.

Not vulnerable

## 0-LENGTH OPENSSL

The server is not vulnerable 0-Length OpenSSL.

Not vulnerable

## CVE-2016-2107

The server is not vulnerable to OpenSSL padding-oracle flaw (CVE-2016-2107).

Not vulnerable

### **SERVER DOES NOT SUPPORT CLIENT-INITIATED INSECURE RENEGOTIATION**

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The server does not support client-initiated insecure renegotiation.

Good configuration

### **ROBOT**

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The server is not vulnerable to ROBOT (Return Of Bleichenbacher's Oracle Threat) vulnerability.

Not vulnerable

### **HEARTBLEED**

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The server version of OpenSSL is not vulnerable to Heartbleed attack.

Not vulnerable

### **CVE-2014-0224**

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The server is not vulnerable to CVE-2014-0224 (OpenSSL CCS flaw).

Not vulnerable

## Test For Compliance With HIPAA Guidance

Reference: HIPAA of 1996, Guidance Specifying the Technologies and Methodologies that Render Protected Health Information Unusable, Unreadable, or Indecipherable to Unauthorized Individuals.

### X.509 CERTIFICATES ARE IN VERSION 3

All the X509 certificates provided by the server are in version 3.

Good configuration

### SERVER SUPPORTS OCSP STAPLING

The server supports OCSP stapling, which allows better verification of the certificate validation status.

Good configuration

### SUPPORTED PROTOCOLS

List of all SSL/TLS protocols supported by the server:

TLSv1.2

Good configuration

### SUPPORTED CIPHERS

List of all cipher suites supported by the server:

#### TLSV1.2

TLS\_DHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

Good configuration

TLS\_DHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384

Good configuration

TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

Good configuration

TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384

Good configuration

### DIFFIE-HELLMAN PARAMETER SIZE

Diffie-Hellman parameter size: 2048 bits

Good configuration

### SUPPORTED ELLIPTIC CURVES

List of all elliptic curves supported by the server:

P-256 (prime256v1) (256 bits)

Good configuration

### EC\_POINT\_FORMAT EXTENSION

The server supports the EC\_POINT\_FORMAT TLS extension.

Good configuration

# Test For Compliance With NIST Guidelines

Reference: NIST Special Publication 800-52 Revision 2 - Section 3

## X.509 CERTIFICATES ARE IN VERSION 3

All the X509 certificates provided by the server are in version 3.

Good configuration

## SERVER SUPPORTS OCSP STAPLING

The server supports OCSP stapling, which allows better verification of the certificate validation status.

Good configuration

## SUPPORTED CIPHERS

List of all cipher suites supported by the server:

### TLSV1.2

TLS\_DHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

Good configuration

TLS\_DHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384

Good configuration

TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

Good configuration

TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384

Good configuration

## SUPPORTED PROTOCOLS

List of all SSL/TLS protocols supported by the server:

TLSv1.2

Good configuration

## DIFFIE-HELLMAN PARAMETER SIZE

Diffie-Hellman parameter size: 2048 bits

Good configuration

## SUPPORTED ELLIPTIC CURVES

List of all elliptic curves supported by the server:

P-256 (prime256v1) (256 bits)

Good configuration

## SERVER DOES NOT SUPPORT OF TLSV1.3

The server does not support TLSv1.3 which is the only version of TLS that currently has no known flaws or exploitable weaknesses.

Information

## SERVER DOES NOT SUPPORT EXTENDED MASTER SECRET

The server does not support Extended Master Secret extension for TLS vresions ≤ 1.2.

Non-compliant with NIST guidelines

## EC\_POINT\_FORMAT EXTENSION

The server supports the EC\_POINT\_FORMAT TLS extension.

Good configuration

## Test For Industry Best-Practices

### DNSCAA

This domain does not have a Certification Authority Authorization (CAA) record.

Information

### CERTIFICATES DO NOT PROVIDE EV

The RSA certificate provided is NOT an Extended Validation (EV) certificate.

Information

### SERVER DOES NOT SUPPORT OF TLSV1.3

The server does not support TLSv1.3 which is the only version of TLS that currently has no known flaws or exploitable weaknesses.

Misconfiguration or weakness

### SERVER DOES NOT HAVE CIPHER PREFERENCE

The server does not prefer cipher suites. We advise to enable this feature in order to enforce usage of the best cipher suites selected.

Misconfiguration or weakness

### ALWAYS-ON SSL

The HTTP version of the website redirects to the HTTPS version.

Good configuration

### SERVER PROVIDES HSTS WITH LONG DURATION

The server provides HTTP Strict Transport Security for more than 6 months:

63072000 seconds

Good configuration

### SERVER DOES NOT SUPPORT CLIENT-INITIATED SECURE RENEGOTIATION

The server does not support client-initiated secure renegotiation.

Good configuration

### SERVER-INITIATED SECURE RENEGOTIATION

The server supports secure server-initiated renegotiation.

Good configuration

### SERVER DOES NOT SUPPORT TLS COMPRESSION

TLS compression is not supported by the server.

Good configuration