

Why does my business website need an SSL Certificate?

An easy to understand explanation of SSL certification



CONTENTS:

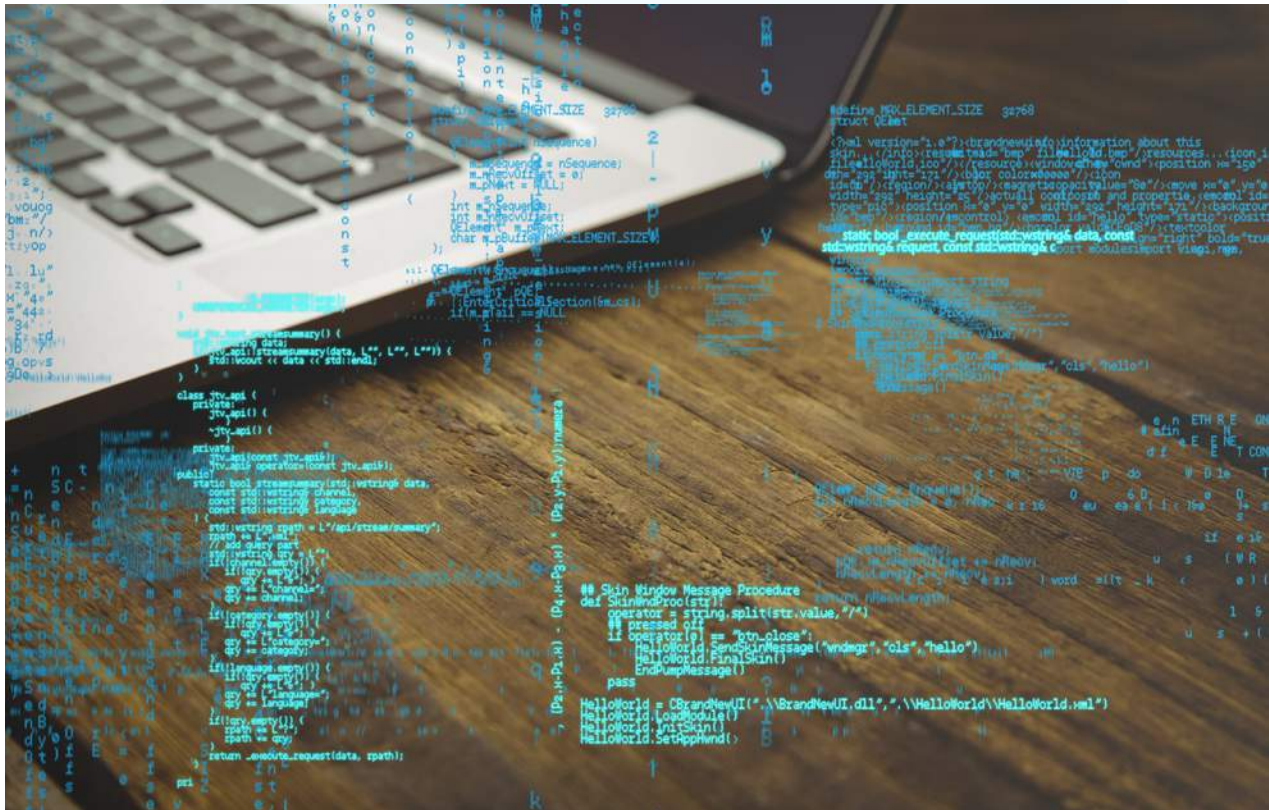
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Contents	1
Introduction	2
Glossary	3
What is an SSL Certificate	4
How Does SSL Encryption Work?	5
The Process:	6
How Do I Know That a Site Has a Valid SSL Certificate?	7
Summary	9

Introduction

Online security is of great importance in our day and age. It should be given as much, if not even more, attention than standard, physical security. Secure Socket Layer (or SSL for short) certificates are what makes this possible. They offer a quick and easy way to protect your website and give your visitors a sense of trust and security.



Glossary

Browser: A piece of software, used to access (browse) the Internet. Examples: Microsoft Internet Explorer (IE, Edge); Mozilla Firefox, Apple Safari, and Google Chrome.

Decryption: “Un-scrambling” information and putting it back in its original format.

Encryption: Information “scrambling”. This makes it impossible for third parties to use

Key: A mathematical formula (algorithm), used to encrypt or decrypt information. The longer they key, the stronger the encryption.



What is an SSL Certificate?

An SSL certificate is a file (or small piece of code) with two functions:

- 1. Authentication and Verification:** It holds information about the authenticity of your website. Should a user wish to make sure that the website is legitimate, all they need to do is click on the padlock symbol in their address bar.
- 2. Data Encryption:** The SSL certificate enables encryption, preventing access to the data by anyone but the intended recipient.

SSL certificates are issued by trusted companies known as Certificate Authorities (CA). The CA has to follow very strict rules about who can receive an SSL certificate. When you have a valid SSL certificate from a CA, it instils a great amount of trust in your potential partners or clients.



How Does SSL Encryption Work?

SSL certificates use keys to encrypt and decrypt information. Unless you have the right key, you will not be able to “open” the information.

Each SSL session consists of two keys:

- The public key - used to encrypt data.
- The private key - used to decrypt data, making it readable for the intended recipient.



The Process:

Every SSL certificate is for a specific server and website domain (website address).

When a visitor accesses a protected website an SSL handshake occurs between their browser and the server.

The visitor will be notified that that a secure session has been initiated – for example, a trust mark will appear.

By clicking on this mark, the visitor can review information about who the website belongs to as well as who issued the certificate.

All of this means that a secure link is established for that session, using a unique session key, and secure communications can begin.



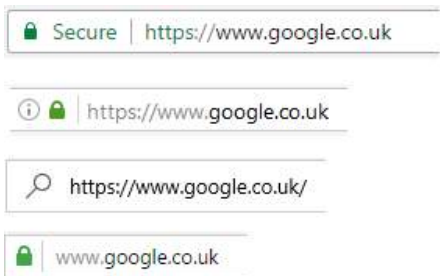
How Do I Know That a Site Has a Valid SSL Certificate?

1. A standard website without SSL security displays “**http://**” before the website address in the browser address bar. This stands for “Hypertext Transfer Protocol,” and is the standard way to transmit data over the Internet.
2. An SSL-protected website, on the other hand, will show “**https://**” before the address. This stands for “Secure HTTP.”
3. There will be a visible, green padlock in the address bar (varies, depending on the used browser).
4. By clicking the closed padlock in the browser window, the website visitor sees the name and credentials of the organisation. When dealing with high-security certificates, such as the Extended Validation (EV) one, the entire address bar will turn green and the company name will also appear next to the URL.



Valid Certificate Examples

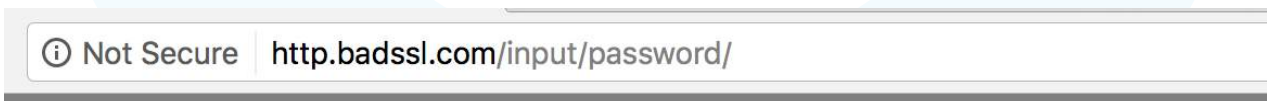
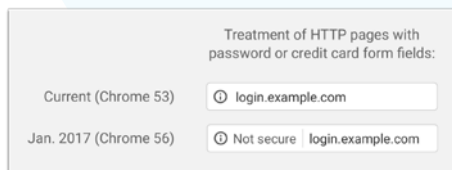
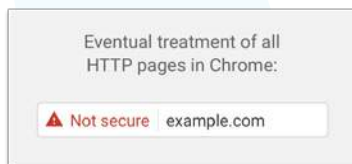
Domain Validation Certificate:



Extended Validation Certificate:



No SSL



Summary

Online business is based on **trust**.

SSL certificates are one of the best tools to gain that trust while safeguarding your business against online threats.

A well-implemented SSL certificate will guarantee that you never lose customers due to the lack of trust and protect any and all data transfers for an affordable price.



Thank you!

Thank you for taking the time to download and read this PDF.

Hopefully, the information in it helped you understand **SSL certification** better.

Should you have any further questions, do not hesitate to contact us.
Our experts are always happy to help!

For More Information

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