Whitepaper

CSA Host Verification

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Author:
Sebastian Kluth
Technical Lead, Certified Senders Alliance

CSA
Certified Senders Alliance

According to item 2.13 of the CSA criteria, an email sender must have sole control over the outbound email servers/hosts. In the new version of the CSA criteria which apply from 2022, Certified Senders must also prove this using a unique token for each host – the CSA Host Verification.

OBJECTIVE AND BACKGROUND

The CSA has decided to introduce Host Verification for two reasons:

1. The changed privacy policy for WHOIS data:
   Due to data protection restrictions on viewing the WHOIS data of an IP or a domain, it is no longer possible for the CSA to easily verify and document ownership.
2. The use of rented servers by email senders

Providers of email dispatch and analysis software are increasingly using rented servers from technical service providers (classic hosting providers or email dispatch platforms) for technical dispatch. In this case, the sending IP address does not belong to the provider of the email sending solution, but to the technical service provider. The provider of the sending solution is therefore not able to adjust the WHOIS entry and – without the introduction of host verification – would not be recognized as being responsible for this email. CSA Host Verification ensures that senders responsible for sending email can also be certified, even though they send via a technical service provider. In addition, the responsibility for sending emails is documented transparently and uniformly so that it can also be checked automatically.

BASIC TECHNICAL PRINCIPLE

Each email server of a sender has a Fully Qualified Domain Name (FQDN), the so-called host name. A host name is a domain that is stored in the DNS and resolves to an IP address. In turn, each IP address points to a host name.
With the help of CSA Host Verification, the proof of control over an email server is shifted from the IP to the host name from a technical perspective. This allows appropriate flexibility when setting up new email servers. It also provides the necessary reassurance and security, because only the owner or dedicated user of an email server can make the changes to the DNS of an FQDN themselves or have them made.

Item 2.11 of the CSA criteria stipulates that the IP address and host name must resolve directly to each other:

```
mta.system.certified-senders.org IN A 46.31.124.70
46.31.124.70 IN PTR mta.system.certified-senders.org
```

Consequently, to certify an email server, the Certified Sender must provide the CSA with the IP address and the associated host name. The technical check of the DNS lookup and rDNS lookup is performed automatically by the CSA.
In order to define the responsibility of the email server in a binding manner, the CSA assigns a unique token after this technical check, which is permanently assigned to this specific combination of IP address and host name.

```
IP-Adresse:     46.31.124.70
Hostname:  mta.system.certified-senders.org
Token:     ed59a25d-6188-4975-adc6-e3a69e529849
```

DNS SETUP FOR CSA HOST VERIFICATION

The FQDN of an email server is stored in the DNS. CSA criterion 2.13 requires an addition to the DNS records of the FQDN after the January 2022 regulations update. Tokens for Certified Senders will be distributed in the period April – June 2022.
The assigned token must be created and stored by the Sender as a TXT entry in the DNS of the FQDN. The entry must be created according to the following pattern:

CSA-certified-host=<token>

Consequently, this then results in the following DNS entry for the FQDN:

mta.system.certified-senders.org IN TXT CSA-certified-host=ed59a25d-6188-4975-adc6-e3a69e529849

VALIDITY OF THE HOST VERIFICATION

The token is generated once to activate the IP address and host name. The service life is not limited.
The correspondence of IP address, host name and token is regularly checked automatically by the CSA. If one of the three prescribed parameters does not match the deposited combination during this automated check, the token loses its validity. The IP will be removed from the Certified IP list and will no longer be eligible for CSA benefits with mailbox providers.
Consequently, every Sender is obliged to have a new token generated when the IP address or host name changes and to store this again in the DNS with the TXT entry described.
This procedure also provides a certain degree of security and reliability with regard to the Sender's certification status. This cannot be imitated and used by third parties, unlike a new additional email header.

SUMMARY

CSA Host Verification is defined on the basis of Internet communication – DNS.

It offers senders of automated emails the option of certification, which was previously excluded by the WHOIS proof requirement.

The individual and dedicated assignment of a token directly to the respective host name of a sender ensures the unique accountability of the sent email volume.

A check for compliance with criterion 2.13 can now be 100% guaranteed and automated.

ABOUT THE CERTIFIED SENDERS ALLIANCE

The Certified Senders Alliance (CSA) is a service of eco – Association of the Internet Industry and was created in cooperation with the German Dialogue Marketing Association (DDV) in 2004. The CSA forms a neutral interface between mailbox providers and senders of commercial emails. The aim of CSA is to increase the quality of commercial emails (e.g., newsletters, invoices, order confirmations, etc.). To achieve this goal, it draws up legal and technical quality standards. The quality standards result from applicable law and technical requirements of the mailbox providers. They are regularly updated according to the current legal basis and market requirements.

ABOUT THE AUTHOR

Sebastian Kluth
Technical Lead, Certified Senders Alliance

Sebastian Kluth is an email marketer through and through. Since September 2019 he has been working as Technical Lead CSA for eco – Association of the Internet Industry in Cologne. As an experienced expert of many years' standing, Sebastian Kluth advises customers and senders on individual solutions in the fields of email marketing, email deliverability, and email response optimization.

Most recently, the qualified computer scientist worked as Teamlead & Senior Email Strategist at Return Path. Before that, he worked in various fields and functions of email marketing with the netnomics agency, with Gruner & Jahr's German press distribution, with Emailvision, and with Otto GmbH & Co. KG in Hamburg.

eco – Association of the Internet Industry
Certified Senders Alliance

Lichtstrasse 43h
50825 Cologne
Germany

Tel: +49 221 – 70 00 48-0
Fax: +44 221 – 70 00 48-111

E-Mail: info@certified-senders.org
https://certified-senders.org/

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