Update to Additional Registered Clauses in SMTP Received Headers

draft-levine-additional-registered-clauses-03

Abstract

SMTP servers add Received: trace headers to mail messages to track their progress. This document updates the registration criteria for Additional Registered Clauses in those headers to Expert Review, and adds new clauses for Server Name Indication (SNI) and sending port number (PORT).

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1. Introduction

SMTP servers add Received: trace headers to mail messages to track their progress. The syntax of those headers is defined in [RFC5321]. Each header can include optional Additional Registered Clauses that log information related to optional SMTP features.

This document updates the registration criteria for Additional Registered Clauses in those headers to Expert Review, and adds a new clause for Server Name Indication (SNI). The headers can include Additional Registered Clauses that add information about optional SMTP features.

2. The Server Name Indication clause

Server Name Indication or SNI [RFC6066] is an optional TLS feature that a TLS client can use to advise a server the name it expects the server to have. When used in the initial negotiation for a STARTTLS [RFC3207] session it enables the server to use a certificate with the identity that the client expects, as is recommended in [RFC7817] and is required for SMTP MTA-STS [RFC8461]. When a client presents a name using SNI, the server can log the name using the "sni" additional-registered-clause.

IANA is requested to add one new entry to the additional-registered-clauses registry:

"sni" - indicates the Server Name Indication was used.

"name" - the name provided by SNI. It has the syntax of a Domain Name.
3. The Port Number clause

When several sending mail hosts send mail from behind a Network Address Translator (NAT), often the only way to tell which host sent the is to look up the sending port number in the NAT’s logs. The server can log the sending port number using the "port" additional-registered-clause.

IANA is requested to add one new entry to the additional-registered-clauses registry:

- "port" - indicates the mail client’s port number
- "number" - the client’s port number. It has the syntax of an integer.

4. IANA Considerations

IANA is requested to update the Registration Procedure for the Additional-registered-clauses registry to Expert Review. The IESG will appoint the expert(s).

4.1. Guidance for Designated Expert

The Designated Expert is expected to check that a proposed Additional-registered-clause has a specification that is stable and detailed enough to implement the clause and interoperate. The Expert should ensure that the clause name is reasonably related to the information it represents, that the contents of the clause are well-defined, and that any external references it depends on, e.g., a vocabulary of keywords, are stable and well-defined.

5. Security Considerations

E-mail is subject to a vast range of threats and abuses. In a few circumstances, a new Additional-registered-clause might disclose information to a recipient that was otherwise unavailable. On the other hand, better logging usually makes it easier to diagnose failures and attacks.

If the SNI information in a STARTTLS negotiation is logged, it may make it easier to determine the recipient(s) of the message if they are not already logged in trace headers.
6. References

6.1. Normative References


6.2. Uninformative References


Appendix A. Change history

02 to 03 Add port numbers. What the heck.

01 to 02 Take out ESNI clause to prevent downref.

00 to 01 Add new ESNI clause. Fix many typos.

00 New draft

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