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## Authentication-Results Registration Update for Sender Policy Framework (SPF) Results

### Abstract

This memo updates the registry of authentication method results in Authentication-Results: message header fields, correcting a discontinuity between the original registry creation and the Sender Policy Framework (SPF) specification.

This memo updates RFC 5451.

### Status of This Memo

This is an Internet Standards Track document.

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## 1. Introduction

[AUTHRES] defined a new header field for electronic mail messages that presents the results of a message authentication effort in a machine-readable format. That Request for Comments created a registry of results for a few message authentication mechanisms, one of which was the Sender Policy Framework [SPF]. The registry contains one entry that is inconsistent with the latter specification, which was noted in an erratum [ERR2617] filed with the RFC Editor. This memo updates the IANA registries accordingly.

## 2. Keywords

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [KEYWORDS].

## 3. New 'fail' Definition

The new "fail" result, replacing the existing "hardfail" result for [SPF] (and thus also for [SENDER-ID]) has the same definition for "hardfail" that was used in Section 2.4.2 of [AUTHRES], namely:

This client is explicitly not authorized to inject or relay mail using the sender's DNS domain.

## 4. IANA Considerations

This section enumerates requested actions of IANA, per [IANA].

#### 4.1. Addition of 'Status' Columns

IANA has amended the Email Authentication Methods and Email Authentication Result Names registries, both in the Email Authentication Parameters group, by adding to each a column called "Status" that will indicate for each entry its current status. Legal values for these columns are as follows:

active: The entry is in current use.

deprecated: The entry is no longer in current use.

New registrations to either table MUST specify one of these values.

All existing entries, except as specified below, are to be noted as "active" as of publication of this memo.

#### 4.2. Update to Result Names

[AUTHRES] listed "hardfail" as the result to be used when a message fails an [SPF] evaluation. However, this latter specification used the string "fail" to denote such failures.

Therefore, IANA has marked "hardfail" in the Email Authentication Result Names registry as "deprecated" and amended the "fail" entry as follows:

Code: fail

Defined: [AUTHRES]

Auth Method: spf, sender-id

Meaning: [this memo] Section 3

Status: active

#### 5. Security Considerations

This memo corrects a registry error. It is possible that older implementations will not recognize or use the corrected entry. Thus, implementers are advised to support both result strings for some period of time. However, it is known that some implementations are already using the SPF-defined result string.

## 6. References

### 6.1. Normative References

- [AUTHRES] Kucherawy, M., "Message Header Field for Indicating Message Authentication Status", RFC 5451, April 2009.
- [ERR2617] "RFC Errata", Errata ID 2617, RFC 5451, <<http://www.rfc-editor.org>>.
- [KEYWORDS] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

### 6.2. Informative References

- [ERR2818] "RFC Errata", Errata ID 2818, RFC 5451, <<http://www.rfc-editor.org>>.
- [IANA] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", BCP 26, RFC 5226, May 2008.
- [SENDER-ID] Lyon, J. and M. Wong, "Sender ID: Authenticating E-Mail", RFC 4406, April 2006.
- [SPF] Wong, M. and W. Schlitt, "Sender Policy Framework (SPF) for Authorizing Use of Domains in E-Mail, Version 1", RFC 4408, April 2006.

#### Appendix A. Examples in RFC 5451

It should be noted that this update also applies to the examples in [AUTHRES], specifically the one in Appendix B.5. The error there [ERR2818] is not corrected by this update, which only deals with the normative portions of that specification and the related IANA registrations. However, it is assumed one could easily see what needs to be corrected there.

Corrected examples will be included in a full update to [AUTHRES] at some future time.

#### Appendix B. Acknowledgements

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