List of SMTP server return codes
SMTP 服务器返回代码列表

This is a list of Simple Mail Transfer Protocol (SMTP) response status codes. Status codes are issued by a server in response to a client's request made to the server.

这是简单邮件传输协议 （SMTP） 响应状态代码的列表。状态代码由服务器发出，以响应客户端向服务器发出的请求。

Unless otherwise stated, all status codes described here is part of the current SMTP standard, RFC 5321 (https://datatracker.ietf.org/doc/html/rfc5321). The message phrases shown are typical, but any human-readable alternative may be provided.

除非另有说明，否则此处描述的所有状态代码都是当前 SMTP 标准 RFC 5321 的一部分。显示的消息短语是典型的，但可以提供任何人类可读的替代方案。

Basic status code 基本状态码

A "Basic Status Code" SMTP reply consists of a three digit number (transmitted as three numeric characters) followed by some text. The number is for use by automata (e.g., email clients) to determine what state to enter next; the text ("Text Part") is for the human user.

“基本状态代码”SMTP 回复由一个三位数字（以三个数字字符传输）后跟一些文本组成。该数字供自动机（例如，电子邮件客户端）用于确定下一步要进入的状态;文本（“文本部分”）适用于人类用户。

The first digit denotes whether the response is good, bad, or incomplete:

第一个数字表示响应是好、坏还是不完整：

- **2yz** (Positive Completion Reply): The requested action has been successfully completed.

  2yz（肯定完成回复）：请求的操作已成功完成。

- **3yz** (Positive Intermediate Reply): The command has been accepted, but the requested action is being held in abeyance, pending receipt of further information.

  3yz（肯定中间答复）：命令已被接受，但请求的操作被搁置，等待收到进一步的信息。

- **4yz** (Transient Negative Completion Reply): The command was not accepted, and the requested action did not occur. However, the error condition is temporary, and the action may be requested again.

  4yz（暂时性否定完成回复）：未接受命令，并且未发生请求的操作。但是，错误条件是暂时的，可能会再次请求该操作。

- **5yz** (Permanent Negative Completion Reply): The command was not accepted and the requested action did not occur. The SMTP client SHOULD NOT repeat the exact request (in the same sequence).

  5yz（永久否定完成回复）：未接受命令，并且未发生请求的操作。SMTP 客户端不应重复确切的请求（以相同的顺序）。

The second digit encodes responses in specific categories:

第二个数字对特定类别的响应进行编码：

- **x0z** (Syntax): These replies refer to syntax errors, syntactically correct commands that do not fit any functional category, and unimplemented or superfluous commands.

  x0z（语法）：这些回复是指语法错误、语法正确的命令（不符合任何功能类别）以及未实现或多余的命令。

- **x1z** (Information): These are replies to requests for information.

  x1z（信息）：这些是对信息请求的回复。

- **x2z** (Connections): These are replies referring to the transmission channel.

  x2z（连接）：这些是涉及传输通道的回复。

- **x3z** : Unspecified. x3z： 未指定。
- **x4z** : Unspecified. x4z： 未指定。
- **x5z** (Mail system): These replies indicate the status of the receiver mail system.

  x5z（邮件系统）：这些答复指示收件人邮件系统的状态。

Enhanced status code 增强的状态代码

The Basic Status Codes have been in SMTP from the beginning, with RFC 821 (https://datatracker.ietf.org/doc/html/rfc821) in 1982, but were extended rather extensively, and haphazardly so that by 2003 RFC 3463 (https://datatracker.ietf.org/doc/html/rfc3463) rather grumpily noted that: "*SMTP suffers some scars from history, most notably the unfortunate damage to the reply code extension mechanism by uncontrolled use.*"

基本状态代码从一开始就存在于SMTP中，1982年的RFC 821，但扩展得相当广泛，而且随意，以至于到2003年RFC 3463相当脾气暴躁地指出：“SMTP遭受了一些历史的伤痕，最明显的是不受控制的使用对回复代码扩展机制的不幸损害。

RFC 3463 (https://datatracker.ietf.org/doc/html/rfc3463) defines a separate series of enhanced mail system status codes which is intended to be better structured, consisting of three numerical fields separated by ".", as follows:

RFC 3463 定义了一组单独的增强型邮件系统状态代码，旨在更好地结构化，由三个以“.”分隔的数字字段组成，如下所示：

```
class "." subject "." detail

  class   = "2" / "4" / "5"

  subject = 1 to 3 digits

  detail  = 1 to 3 digits
```

The **classes** are defined as follows:

这些类定义如下：

- **2.XXX.XXX** Success: Report of a positive delivery action.

  2.XXX.XXX 成功：报告积极的交付操作。

- **4.XXX.XXX** Persistent Transient Failure: Message as sent is valid, but persistence of some temporary conditions has caused abandonment or delay.

  4.XXX.XXX 持续暂时性故障：发送的消息有效，但某些临时条件的持久性导致放弃或延迟。

- **5.XXX.XXX** Permanent Failure: Not likely to be resolved by resending the message in current form.

  5.XXX.XXX 永久失败：不太可能通过以当前形式重新发送邮件来解决。

In general the *class* identifier MUST match the first digit of the Basic Status Code to which it applies.[1]

通常，类标识符必须与它所应用的基本状态代码的第一个数字匹配。[1]

The **subjects** are defined as follows:

主题定义如下：

- **X.0.XXX** Other or Undefined Status

  X.0.XXX 其他或未定义状态

- **X.1.XXX** Addressing Status

  X.1.XXX 寻址状态

- **X.2.XXX** Mailbox Status X.2.XXX 邮箱状态
- **X.3.XXX** Mail System Status

  X.3.XXX 邮件系统状态

- **X.4.XXX** Network and Routing Status

  X.4.XXX 网络和路由状态

- **X.5.XXX** Mail Delivery Protocol Status

  X.5.XXX 邮件传递协议状态

- **X.6.XXX** Message Content or Media Status

  X.6.XXX 消息内容或媒体状态

- **X.7.XXX** Security or Policy Status

  X.7.XXX 安全或策略状态

The meaning of the "detail" field depends on the class and the subject, and are listed in RFC 3463 (https://datatracker.ietf.org/doc/html/rfc3463) and RFC 5248 (https://datatracker.ietf.org/doc/html/rfc5248).

“详细信息”字段的含义取决于类和主题，并在 RFC 3463 和 RFC 5248 中列出。

A server capable of replying with an Enhanced Status Code MUST preface (prepend) the Text Part of SMTP Server responses with the Enhanced Status Code followed by one or more spaces. For example, the "221 Bye" reply (after QUIT command) MUST be sent as "221 2.0.0 Bye" instead.[1]

能够使用增强状态代码进行回复的服务器必须在 SMTP 服务器响应的文本部分前面加上增强状态代码，后跟一个或多个空格。例如，“221 再见”回复（在 QUIT 命令之后）必须改为作为“221 2.0.0 再见”发送。[1]

The Internet Assigned Numbers Authority (IANA) maintains the official registry of these enhanced status codes.[2]

互联网号码分配机构 （IANA） 维护这些增强状态代码的官方注册机构。[2]

Common status codes 通用状态代码

This section list some of the more commonly encountered SMTP Status Codes. This list is not exhaustive, and the actual text message (outside of the 3-field Enhanced Status Code) might be different.

本节列出了一些更常见的 SMTP 状态代码。此列表并不详尽，实际文本消息（在 3 字段增强状态代码之外）可能有所不同。

— 2yz Positive completion

— 2yz 正完成

211 *System status, or system help reply*

211 系统状态或系统帮助回复

214 *Help message* (A response to the HELP command)

214 帮助消息（对 HELP 命令的响应）

220 *<domain> Service ready*

220 服务就绪

221 *<domain> Service closing transmission channel*

221 业务闭路传输通道

221 2.0.0 *Goodbye* [1]

221 2.0.0 再见 [1]

235 2.7.0 *Authentication succeeded* [3]

235 2.7.0 身份验证成功 [3]

240 *QUIT* 240 退出

250 *Requested mail action okay, completed*

250 请求的邮件操作正常，已完成

251 *User not local; will forward*

251 用户不是本地用户;将转发

252 *Cannot verify the user, but it will try to deliver the message anyway*

252 无法验证用户，但无论如何都会尝试传递消息

— 3yz Positive intermediate

— 3yz 正中间体

334 (Server challenge - the text part contains the Base64-encoded challenge) [3]

334（服务器质询 - 文本部分包含 Base64 编码质询） [3]

354 *Start mail input* 354 启动邮件输入

— 4yz Transient negative completion

— 4yz 瞬态负完成

"Transient Negative" means the error condition is temporary, and the action may be requested again. The sender should return to the beginning of the command sequence (if any).

“暂时性否定”表示错误条件是暂时的，可能会再次请求该操作。发送方应返回到命令序列的开头（如果有）。

The accurate meaning of "transient" needs to be agreed upon between the two different sites (receiver- and sender-SMTP agents) must agree on the interpretation. Each reply in this category might have a different time value, but the SMTP client SHOULD try again.

“瞬态”的准确含义需要在两个不同的站点（接收方和发送方-SMTP 代理）之间达成一致，必须就解释达成一致。此类别中的每个答复可能具有不同的时间值，但 SMTP 客户端应重试。

421 *Service not available, closing transmission channel* (This may be a reply to any command if the service knows it must shut down)

432 4.7.12 *A password transition is needed* [3]

450 *Requested mail action not taken: mailbox unavailable* (e.g., mailbox busy or temporarily blocked for policy reasons)

451 *Requested action aborted: local error in processing*

451 4.4.1 *IMAP server unavailable* [4]

452 *Requested action not taken: insufficient system storage*

454 4.7.0 *Temporary authentication failure* [3]

455 *Server unable to accommodate parameters*

— 5yz Permanent negative completion

The SMTP client SHOULD NOT repeat the exact request (in the same sequence). Even some "permanent" error conditions can be corrected, so the human user may want to direct the SMTP client to reinitiate the command sequence by direct action at some point in the future.

500 *Syntax error, command unrecognized* (This may include errors such as command line too long)

500 5.5.6 *Authentication Exchange line is too long* [3]

501 *Syntax error in parameters or arguments*

501 5.5.2 *Cannot Base64-decode Client responses* [3]

501 5.7.0 *Client initiated Authentication Exchange* (only when the SASL mechanism specified that client does not begin the authentication exchange) [3]

502 *Command not implemented*

503 *Bad sequence of commands*

504 *Command parameter is not implemented*

504 5.5.4 *Unrecognized authentication type* [3]

521 *Server does not accept mail* [5]

523 *Encryption Needed* [6]

530 5.7.0 *Authentication required* [3]

534 5.7.9 *Authentication mechanism is too weak* [3]

535 5.7.8 *Authentication credentials invalid* [3]

538 5.7.11 *Encryption required for requested authentication mechanism*[3]

550 *Requested action not taken: mailbox unavailable* (e.g., mailbox not found, no access, or command rejected for policy reasons)

551 *User not local; please try <forward-path>*

552 *Requested mail action aborted: exceeded storage allocation*

553 *Requested action not taken: mailbox name not allowed*

554 *Transaction has failed* (Or, in the case of a connection-opening response, "No SMTP service here")

554 5.3.4 *Message too big for system* [4]

556 *Domain does not accept mail* [5]

Example

Below is an example SMTP connection, where a client "C" is sending to server "S":

```
S: 220 smtp.example.com ESMTP Postfix
C: HELO relay.example.com
S: 250 smtp.example.com, I am glad to meet you
C: MAIL FROM:<bob@example.com>
S: 250 Ok
C: RCPT TO:<alice@example.com>
```

```
S: 250 Ok
C: RCPT TO:<theboss@example.com>
S: 250 Ok
C: DATA
S: 354 End data with <CR><LF>.<CR><LF>
C: From: "Bob Example" <bob@example.com>
C: To: Alice Example <alice@example.com>
C: Cc: theboss@example.com
C: Date: Tue, 15 Jan 2008 16:02:43 -0500
C: Subject: Test message
C:
C: Hello Alice.
C: This is a test message with 5 header fields and 4 lines in the message body.
C: Your friend,
C: Bob
C: .
S: 250 Ok: queued as 12345
C: QUIT
S: 221 Bye
{The server closes the connection}
```

And below is an example of an SMTP connection in which the SMTP Server supports the Enhanced Status Code, taken from RFC 2034 (https://datatracker.ietf.org/doc/html/rfc2034):

```
S: 220 dbc.mtview.ca.us SMTP service ready
C: EHLO ymir.claremont.edu
S: 250-dbc.mtview.ca.us says hello
S: 250 ENHANCEDSTATUSCODES
C: MAIL FROM:<ned@ymir.claremont.edu>
S: 250 2.1.0 Originator <ned@ymir.claremont.edu> ok
C: RCPT TO:<mrose@dbc.mtview.ca.us>
S: 250 2.1.5 Recipient <mrose@dbc.mtview.ca.us> ok
C: RCPT TO:<nosuchuser@dbc.mtview.ca.us>
S: 550 5.1.1 Mailbox "nosuchuser" does not exist
C: RCPT TO:<remoteuser@isi.edu>
S: 551-5.7.1 Forwarding to remote hosts disabled
S: 551 5.7.1 Select another host to act as your forwarder
C: DATA
S: 354 Send message, ending in CRLF.CRLF.
 ...
C: .
S: 250 2.6.0 Message accepted
C: QUIT
S: 221 2.0.0 Goodbye
{The server closes the connection}
```

References

1. RFC 2034 (https://datatracker.ietf.org/doc/html/rfc2034)
2. "Simple Mail Transfer Protocol (SMTP) Enhanced Status Codes Registry" (https://www.iana.org/assignments/smtp-enhanced-status-codes/smtp-enhanced-status-codes.xhtml). IANA. Retrieved December 20, 2018.
3. RFC 4954 (https://datatracker.ietf.org/doc/html/rfc4954)
4. RFC 4468 (https://datatracker.ietf.org/doc/html/rfc4468)
5. RFC 7504 (https://datatracker.ietf.org/doc/html/rfc7504)
6. RFC 5248 (https://datatracker.ietf.org/doc/html/rfc5248)
