SIMPLE MAIL TRANSFER PROTOCOL

```
Simple Mail Transfer Protocol
    Response code: Requested mail action okay, completed (250)
        Response parameter: BM1P287CA0015.outlook.office365.com Hello [2400:1a00:b1e0:9a93:9c3e:6d73:432d:8c39]
0000 Oc 9a 3c ab ac e8 c4 48 fa d5 b8 e0 86 dd 60 00
                                                             · · < · · · · H
0010 00 00 00 6d 06 ef 26 03 10 46 09 00 00 40 00 00 00 00 00 00 00 02 24 00 1a 00 b1 e0 9a 93 9c 3e
                                                            - m &
                                                                      F @
                                                                   $ -
0030 6d 73 43 2d 8c 39 02 4b c4 f6 35 b4 11 d4 d1 5a
                                                           msC- 9·K ··5····Z
0040 bb bd 50 18 40 02 b1 90 00 00 32 35 30 20 42 4d
                                                            ..P.@... ..250 BM
3050 31 50 32 38 37 43 41 30 30 31 35 2e 6f 75 74 6c
3060 6f 6f 6b 2e 6f 66 66 69 63 65 33 36 35 2e 63 6f
                                                            1P287CA0 015.outl
                                                            ook.offi ce365.co
     6d 20 48 65 6c 6c 6f 20 5b 32 34 30 30 3a 31 61
30 30 3a 62 31 65 30 3a 39 61 39 33 3a 39 63 33
                                                            m Hello [2400:1a
00:b1e0: 9a93:9c3
0090 65 3a 36 64 37 33 3a 34 33 32 64 3a 38 63 33 39
                                                            e:6d73:4 32d:8c39
     5d 0d 0a
```

```
220 BM1P287CA0015.outlook.office365.com Microsoft ESMTP MAIL Service ready at Sun, 28 Jul 2024 12:34:51 +0000 [08D CAE0C336F2D37] helo
250 BM1P287CA0015.outlook.office365.com Hello [2400:1a00:b1e0:9a93:9c3e:6d73:432d:8c39]
```

Simple Mail Transfer Protocol (SMTP) is a protocol used for sending and receiving email. Here are the key points about SMTP:

- 1. **Purpose**: SMTP is designed for the transmission of emails across networks.
- 2. **Functionality**: It handles the sending, receiving, and relaying of email messages between email servers.

3. Process:

- Client-Server Interaction: The email client (sender) connects to an SMTP server to send an email.
- Commands and Responses: The interaction involves a series of commands (e.g., HELO, MAIL FROM, RCPT TO, DATA) and responses (e.g., 250 OK, 354 Start mail input) to exchange information.
- **Relaying:** If the recipient's email server is not the same as the sender's, the email is relayed through multiple SMTP servers until it reaches the

recipient's server.

- 4. **Ports**: SMTP typically uses port 25 for communication between servers, port 587 for client to server communication, and port 465 for secure SMTP (SMTPS) over SSL/TLS.
- 5. **Authentication**: Modern implementations of SMTP often require authentication to prevent misuse by spammers (SMTP-AUTH).
- 6. **Security**: SMTP can be secured using protocols like STARTTLS to encrypt the connection, ensuring the privacy and integrity of the email content during transmission.

SMTP is a fundamental protocol for email communication, ensuring that messages are sent and routed correctly across the internet.