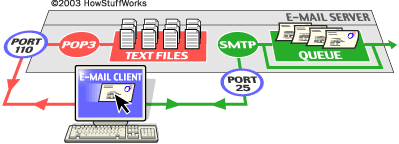
SMTP Server

An e-mail server that uses the Simple Mail Transfer Protocol (SMTP). SMTP is a member of the TCP/IP suite of protocols that governs the exchange of electronic mail between message transfer agents.



Whenever you send a piece of e-mail, your e-mail client interacts with the SMTP server to handle the sending. The SMTP server on your host may have conversations with other SMTP servers to deliver the e-mail.

Let's assume that I want to send a piece of e-mail. My e-mail ID is brain, and I have my account on howstuffworks.com. I want to send e-mail to jsmith@mindspring.com. I am using a stand-alone e-mail client like Outlook Express.

When I set up my account at howstuffworks, I told Outlook Express the name of the mail server -- mail.howstuffworks.com. When I compose a message and press the Send button, here's what happens:

1. Outlook Express connects to the SMTP server at mail.howstuffworks.com using port 25.
2. Outlook Express has a conversation with the SMTP server, telling the SMTP server the address of the sender and the address of the recipient, as well as the body of the message.
3. The SMTP server takes the "to" address (jsmith@mindspring.com) and breaks it into two parts: the recipient name (jsmith) and the domain name (mindspring.com). If the "to" address had been another user at howstuffworks.com, the SMTP server would simply hand the message to the POP3 server for howstuffworks.com (using a little program called the **delivery agent**). Since the recipient is at another domain, SMTP needs to communicate with that domain.
4. The SMTP server has a conversation with a **Domain Name Server**, or **DNS**. It says, "Can you give me the IP address of the SMTP server for mindspring.com?" The DNS replies with the one or more IP addresses for the SMTP server(s) that Mindspring operates.
5. The SMTP server at howstuffworks.com connects with the SMTP server at Mindspring using port 25. It has the same simple text conversation that my e-mail client had with the SMTP server for HowStuffWorks, and gives the message to the Mindspring server. The Mindspring server recognizes that the domain name for jsmith is at Mindspring, so it hands the message to Mindspring's POP3 server, which puts the message in jsmith's mailbox.

If, for some reason, the SMTP server at HowStuffWorks cannot connect with the SMTP server at Mindspring, then the message goes into a queue. The SMTP server on most machines uses a program called **sendmail** to do the actual sending, so this queue is called the **sendmail queue**. Sendmail will periodically try to resend the messages in its queue. For example, it might retry every 15 minutes. After four hours, it will usually send you a piece of mail that tells you there is some sort of problem. After five days, most sendmail configurations give up and return the mail to you undelivered.

POP3 Server

POP stands for Post Office Protocol. This is used to describe how e-mail clients interact with mail servers. The POP3 Server is a type of mail server used for incoming mail. In simple terms, POP servers provide a mail-drop service (a temporary mailbox to leave messages so they can be picked up at the recipient's convenience.) When users connect to their ISP POP servers, their e-mail software interface with the server and download any messages for them. POP is only used to receive messages, it is not used to send them.