

I describe the IMAP protocol commands in TABLE 1. I have issued each of these commands in isolation via a telnet connection to the IMAP server and observed the exact system call activity that it generates (instead of using a client like pine that might issue a set of IMAP commands at a time corresponding to some user action).

### IMAP Protocol Summary

TABLE 1	IMAP Command	Args Blank => no args	Return from Server/ Comments	
	Any State			
1	capability		gets server capability	
2	logout			
3	noop		use to check for new mail and to prevent connection timeout	
	Non-Authenticated State			
4	authenticate	mechanism	SASL auth	
5	login	user/passwd		
	Authenticated State			
6	append	mailbox, flags, date, msg size, body	adds message to specific mailbox	
7	create	mailbox	new mailbox	
8	delete	mailbox	deletes mailbox	
9	examine	mailbox	selects in read only mode	
10	list	basename , mailbox	list of mailbox names	
11	lsub	basename , mailbox	list of mailboxes user is subscribed	
12	rename	oldmailbox, new		
13	select	mailbox	so that messages in mailbox can be r/w accessed	
14	status	mailbox, item	gets status for mailbox not currently selected. For types of items, see TABLE 2.	
15	subscribe	mailbox	to a new mailbox	

# IMAP

<b>TABLE 1</b>	<b>IMAP Command</b>	<b>Args Blank =&gt; no args</b>	<b>Return from Server/ Comments</b>	
<b>16</b>	<b>unsubscribe</b>	mailbox		
	<b>Selected State</b>			
<b>17</b>	<b>check</b>		housekeeping	
<b>18</b>	<b>close</b>		removes messages from currently selected mailbox having a delete flag	
<b>19</b>	<b>copy</b>	messageset, mailbox	copies messages to another mailbox from the current	
<b>20</b>	<b>expunge</b>			
<b>21</b>	<b>fetch</b>	message-set, data-items	data-items are described in TABLE 3	
<b>22</b>	<b>search</b>	charset, criteria	returns list of messages, the search criteria is detailed and uses keys for different message parts	
<b>23</b>	<b>store</b>	message, data	set/unset message flags	
<b>24</b>	<b>uid</b>	command command-args	uses UID numbers instead of message sequence numbers	

<b>STATUS Data Items</b>	<b>TABLE 2</b>
<b>Messages</b>	# of messages in mailbox
<b>Recent</b>	messages having recent flag
<b>UIDNext</b>	Next UID to be assigned
<b>UIDValidity</b>	Unique ID of mailbox
<b>Unseen</b>	# of unread messages

<b>FETCH Data Items</b>	<b>TABLE 3</b>
<b>ALL</b>	Flags+Envelope+Internaldate+RFC822.Size
<b>Body</b>	variants exist
<b>Bodystructure</b>	MIME representation
<b>Envelope</b>	parsed representation of RFC envelope
<b>Fast</b>	Flags+Internaldate+RFC822.Size
<b>Flags</b>	flags that are set for the message
<b>Full</b>	Flags+Internaldate+RFC822.Size+Envelope+body
<b>INTERNALDATE</b>	date message was received by IMAP server
<b>RFC822</b>	entire rfc822 message
<b>RFC822.Header, Size, Text</b>	fetches parts of the entire message
<b>UID</b>	message's UID

### Some Notes on IMAP

1. mailbox is a mail folder. The default mailbox is INBOX
2. For currently selected mailbox, STATUS command is periodically issued
3. Hierarchical mailbox support (logical mailboxes)
4. noop is periodically performed to keep connection alive
5. Multiple users sharing a mailbox, supports concurrent read/write access
6. Attributes are associated with messages and not with the mailbox