

## Chapter 7

葛现隆

1

Yes, a machine can have more than one Ethernet cards, which have different MAC and need different IP addresses.

2

The 3072 bytes will be broken into 1024 parts of 3 bytes, and each 3 bytes will be encoded into 4bytes using base 64, totally 4096 bytes.

4096 bytes need 52 (4096/80) lines, which means we need 52 CRs and 52 LFs.

Totally the length is  $4096 + 52 * 2 = 4200$  bytes.

3.

If there is a string begin with '=' and followed by two digit like "20", then this will be recognized as a space, the solution is to encode '=' to =61, so the problem can be solved.

4.

Nowadays, email ISP like 163 and many other keeps your email for along time, but not the whole message. Actually, the text part of the email takes little space comparing nowadays large storage, but some attachments can be very big. It's necessary to keep user's email attachments for a period of time, and after that it should be deleted from server. And if users need to save the attachments for longer time, it's proper to let user to pay it.

5.

There is RFC 1738 indicating port problem, and as following(<http://www.ietf.org/rfc/rfc1738.txt>):

**port**

***The port number to connect to. Most schemes designate protocols that have a default port number. Another port number may optionally be supplied, in decimal, separated from the host by a colon. If the port is omitted, the colon is as well.***

6

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The URL can be : <ftp://www.cs.stanford.edu.us/ftp/pub/freebies/newprog.c>