Chapter 16

Domain Name System (DNS)

Figure 16-1

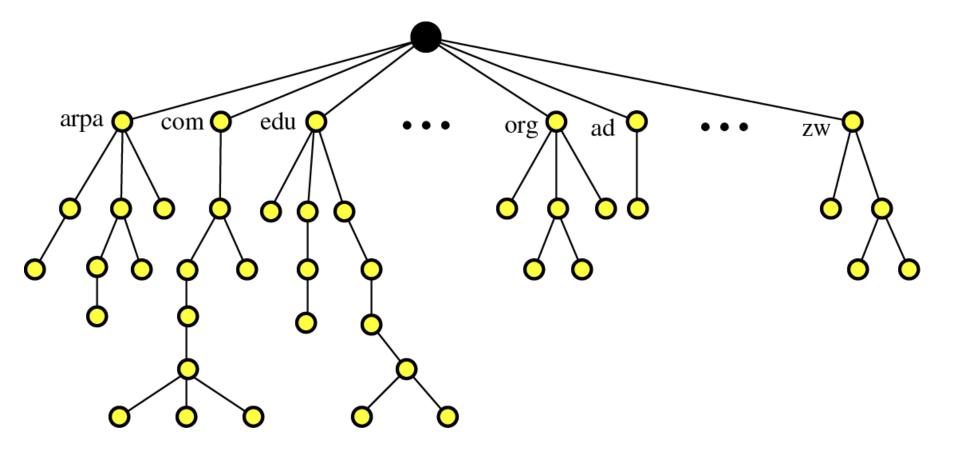


Figure 16-2 Root Label edu edu. Domain name Label fhda.edu. Domain name fhda Label atc.fhda.edu. atc Domain name Label challenger.atc.fhda.edu. challenger Domain name

FQDN

challenger.atc.fhda.edu.

cs.hmme.com.

www.funny.int.

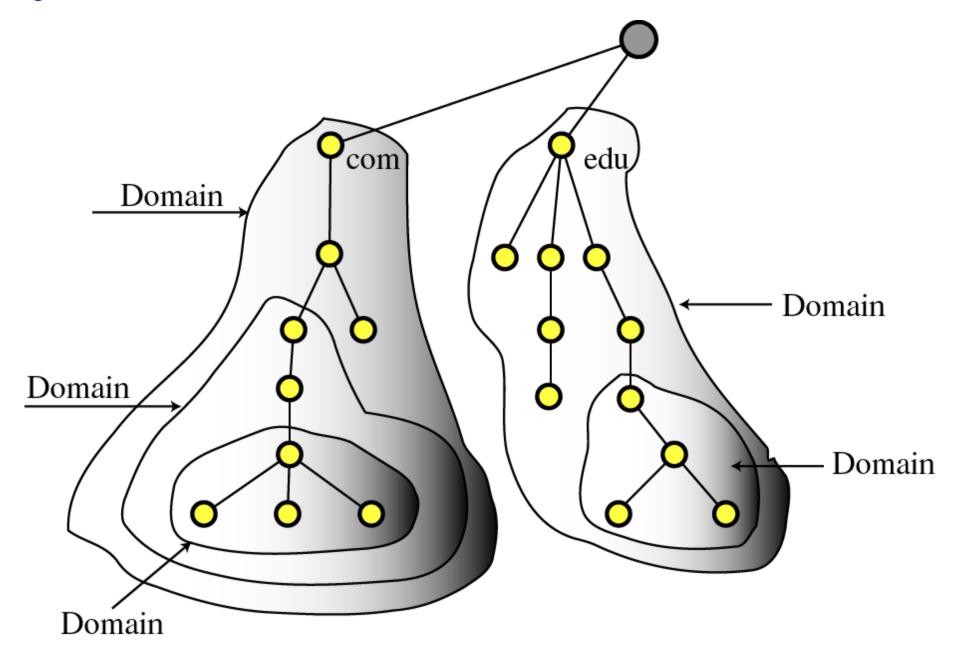
PQDN

challenger.atc.fhda.edu

cs.hmme

WWW

Figure 16-4



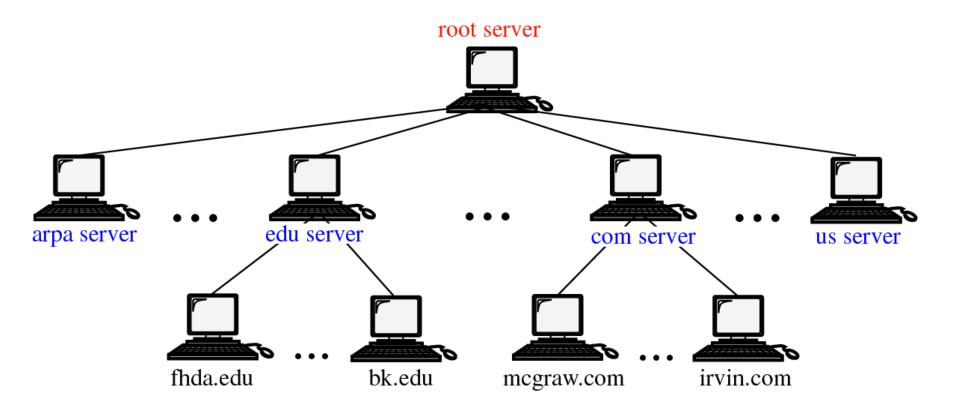


Figure 16-6

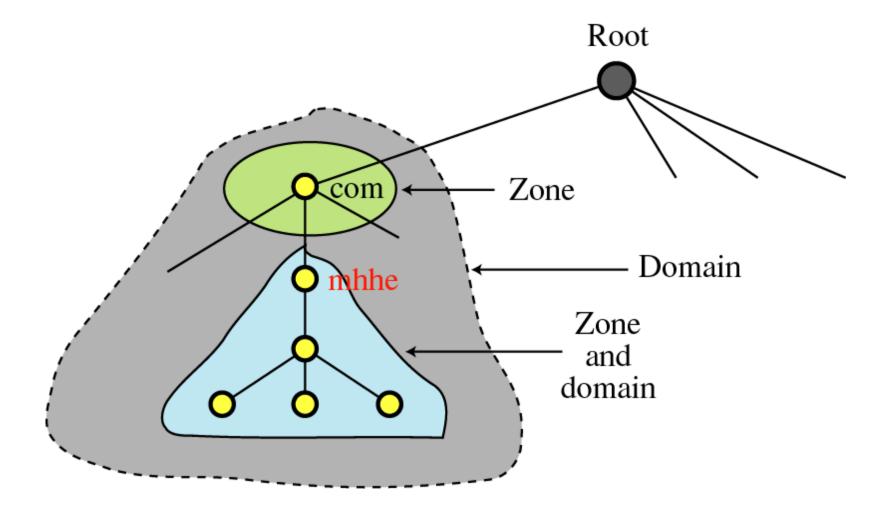


Figure 16-7

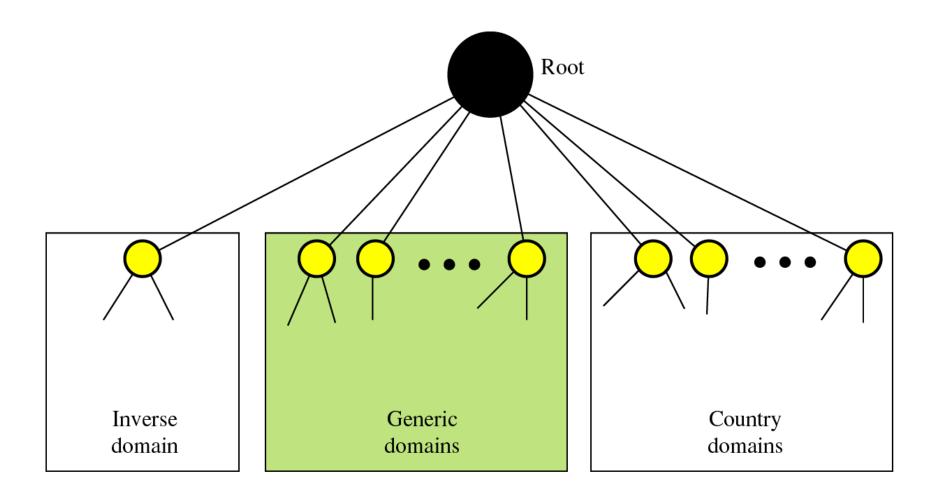
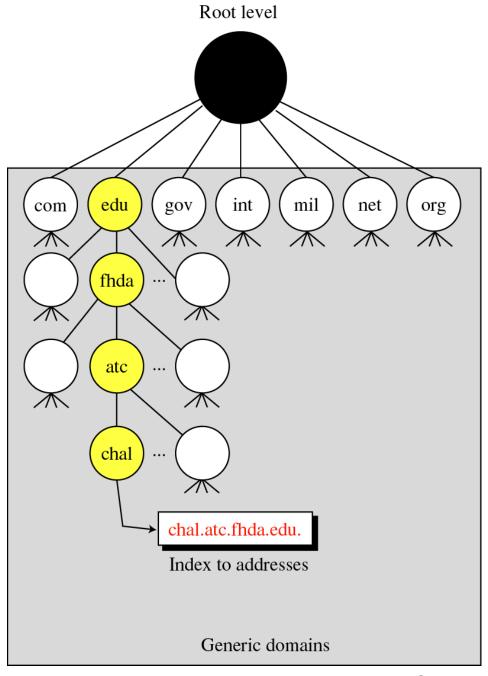


Figure 16-8



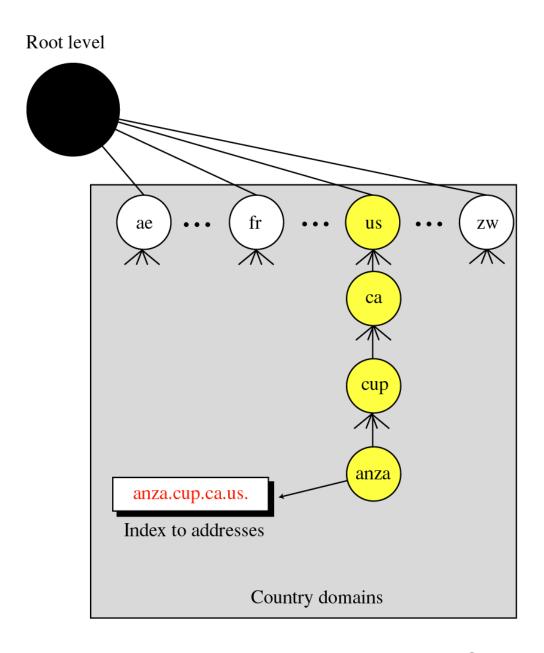
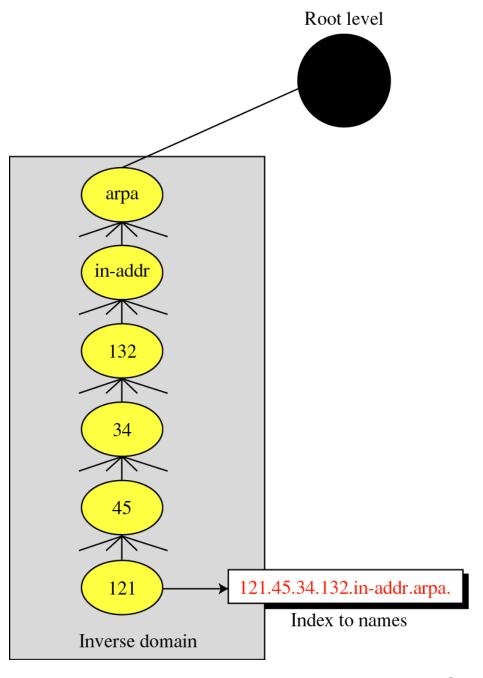


Figure 16-10



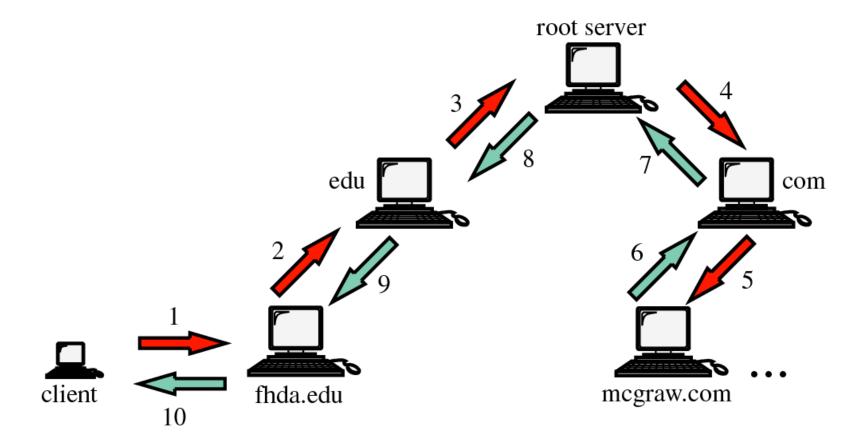


Figure 16-12

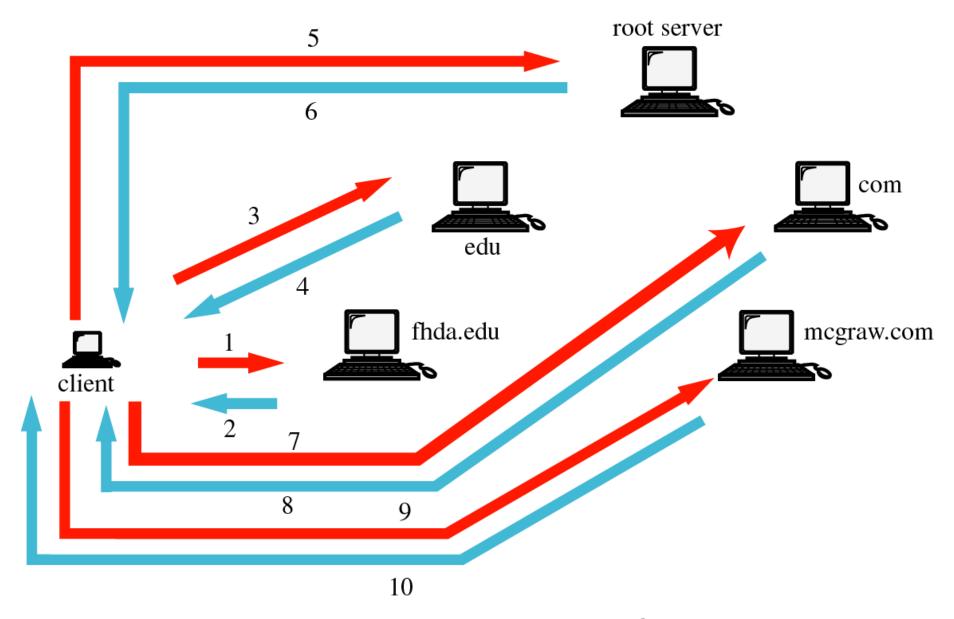
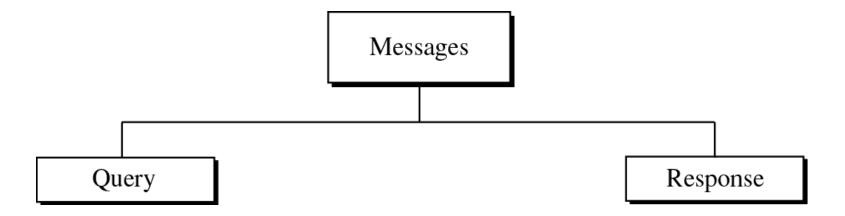
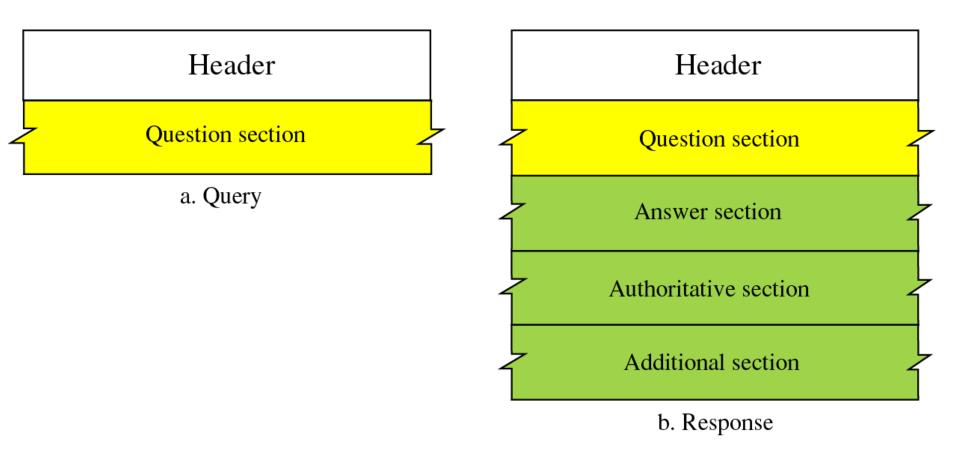


Figure 16-13





Identification	Flags
Number of question records	Number of answer records (All 0s in query message)
Number of authoritative records (All 0s in query message)	Number of additional records (All 0s in query message)

Figure 16-16

QR OpCode AA TC RD RA Three 0s rCode

Figure 16-17

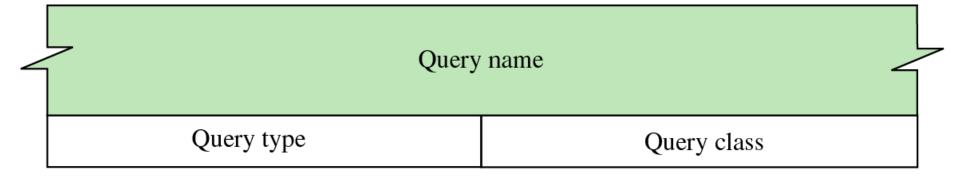


Figure 16-18

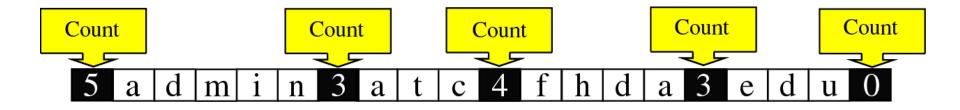


Figure 16-19

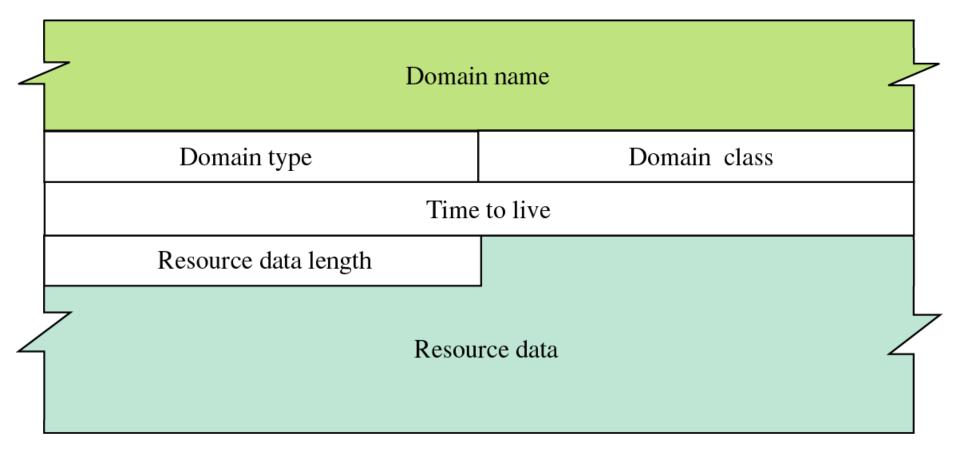


Figure 16-20

Address of the beginning byte

2 bits

14 bits

Figure 16-21

0x1333		0x0100		
	1		0	
0		0		
4	'c'	'h'	'a'	
'1'	4	'f'	'h'	
'd'	'a'	3	'e'	
'd'	'u'	0	Continued on next line	
1	1			

Figure 16-22

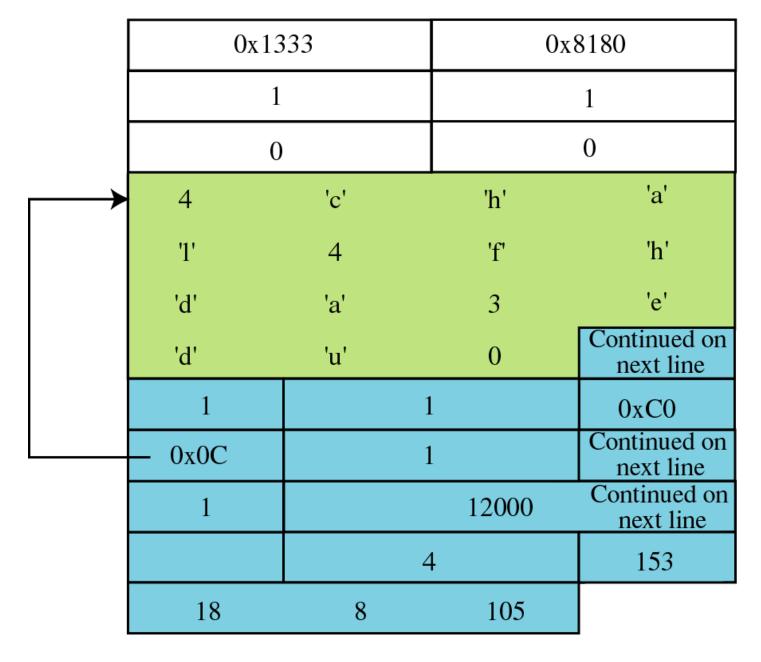


Figure 16-23

0x1200		0x0900	
1		0	
0		0	
1	'9'	1	'7'
1	'2'	3	'1'
'5'	'3'	7	'i'
'n'	121	'a'	'd'
'd'	'r'	4	'a'
'r'	'p'	'a'	0
12		1	

Figure 16-24

