

[illegible]

```
#####  
#####  
ifconfig eth2:0 192.168.3.100 netmask 255.255.255.0 # instanciar els  
virtual hosts  
ifconfig eth2:1 192.168.3.200 netmask 255.255.255.0  
ifconfig eth2:2 172.17.3.2 netmask 255.255.0.0  
  
#####  
#####  
# 3r matar el network manager  
  
echo ` 33333333333333333333333333333333`  
  
`  
  
#####  
#####  
ps aux | grep Manager # mirar si existeix - dimoni del network  
management  
./mata_automatic.sh # matar els dimonis perquè poguem editar les  
taules, enlloc de tmp miror  
#####  
#####  
  
# 4t configurar la pagina web  
echo ` 44444444444444444444444444444444`  
  
`  
  
    # configurar les webs catàleg i productes amb accés basat en noms  
    # cadascun en directoris diferents  
    # els activem i comprovem que funcionen  
# podem fer la prova amb un:  
  
# eliminar si esitien  
rm -r /etc/apache2/sites-available/general 2> /dev/null  
rm -r /etc/apache2/sites-available/productes 2> /dev/null  
rm -r /etc/apache2/sites-available/catalogue 2> /dev/null  
rm -r /etc/apache2/sites-available/intranet 2> /dev/null  
rm -r /etc/apache2/sites-available/botiga 2> /dev/null  
#####  
#####  
# carregar els fitxers de configuració  
cp -r FILES/general /etc/apache2/sites-available/  
cp -r FILES/productes /etc/apache2/sites-available/  
cp -r FILES/catalogue /etc/apache2/sites-available/  
cp -r FILES/intranet /etc/apache2/sites-available/  
cp -r FILES/botiga /etc/apache2/sites-available/  
#####  
#####  
  
#####  
#####  
service apache2 start # inicialitzar el servidor apache2  
#####  
#####
```

```
# ara caldria posar les webs en marxa i després introduirli contingut
sudo service apache2 reload
#####
#####
sudo a2ensite catalag      # instanciar les webs amb la configuració
especificada
sudo a2ensite productes    #
sudo a2ensite intranet     #
# sudo a2ensite botiga      # no cal encara -> aquest sera botiga-ssl
sudo a2ensite general      #
#####
#####
```

```
echo '55555555555555555555555555555555'
```

```

# executar el script de crear usuarios...
#####
#####
# sudo ./createUserMyWeb.sh zappa rahuy # crear els usuaris de prova
#####
#####

```

```
#####  
#####  
rm /etc/apache2/mods-available/dir.conf  
# rm /etc/apache2/mods-available/userdir.conf
```

```
cp FILES/dir.conf /etc/apache2/mods-available/dir.conf #  
modificació de configuració  
# cp FILES/userdir.conf /etc/apache2/mods-available/userdir.conf #  
usuaris de intranet
```

```
# activar el modul userdir
a2enmod userdir
# restart the apache server to make the change take effect
# more /etc/apache2/mods-available/userdir.conf
#####
```

```
## cal configurar que els usuaris només pengin del servidor per defecte,
```

```
# http://www.techytalk.info/enable-userdir-apache-module-ubuntu-
debian-based-linux-distributions/
```

```
## disableing
# http://serverfault.com/questions/238847/apache-2-userdir-for-only-
one-virtualhost
```

5

/etc/hosts

```
127.0.0.1    localhost
127.0.1.1    DS.localdomain  DS

192.168.3.100 www.gsx.ct      general defecte
192.168.3.100 www.cataleg.gsx.ct cataleg
192.168.3.100 www.productes.gsx.ct productes
192.168.3.200 www.botiga.gsx.ct  botiga
172.17.3.2    www.intranet.gsx   intranet
```

```
# The following lines are desirable for IPv6 capable hosts
::1          ip6-localhost ip6-loopback
fe00::0      ip6-localnet
ff00::0      ip6-mcastprefix
ff02::1      ip6-allnodes
ff02::2      ip6-allrouters
```

userdir.conf

```
<IfModule mod_userdir.c>
    UserDir myweb
    UserDir disabled root

    <Directory /home/*/myweb>
        AllowOverride FileInfo AuthConfig Limit Indexes
        Options MultiViews Indexes SymLinksIfOwnerMatch
IncludesNoExec
    <Limit GET POST OPTIONS>
        Order allow,deny
        Allow from all
    </Limit>
    <LimitExcept GET POST OPTIONS>
        Order deny,allow
        Deny from all
    </LimitExcept>
    </Directory>
</IfModule>
```

dir.conf

```
<IfModule mod_dir.c>

    DirectoryIndex hola.html index.html index.cgi index.pl
    index.php index.xhtml index.htm

</IfModule>
```

```
#!/bin/bash

echo 'ROUTER
eth2      Link encap:Ethernet  HWaddr 00:1a:92:77:70:f4
          inet addr:10.21.6.6
'

[ `whoami` = 'root' ] || exit 1

ifconfig eth2 down

# conectar cables mirar quina targeta...
# pasem pera parametre la targeta ethernet correcte
# mii-tool | head -n 1

if [ $# -eq 0 ]
then
ethX=$(mii-tool | head -n1 | cut -c1-4)
else
ethX=$1
fi

ethX='eth0' # definició manual dela interfície de conexió

#####
# cal deshabilitar los de arg1 i pasarlos a arg2
# deshabilitar tots los eth2
# ifconfig eth2 down
#####

ifconfig $ethX 192.168.1.123 netmask 255.255.255.0 broadcast
192.168.1.255 up
ifconfig $ethX:0 172.18.3.100 netmask 255.254.0.0
ifconfig $ethX:1 172.18.3.200 netmask 255.254.0.0
ifconfig $ethX:2 172.17.3.2 netmask 255.254.0.0
# ifconfig eth0:3 172.18.0.123 netmask 255.254.0.0

rm /etc/hosts
cp FILES/hosts /etc/hosts

# canvi port botiga-ssl

rm /etc/apache2/sites-available/botiga-ssl
cp FILES/botiga-ssl /etc/apache2/sites-available/

rm /etc/apache2/sites-available/intranet
cp FILES/intranet /etc/apache2/sites-available/

# matar los network deamons
./mata_automatic.sh

# a qui pregunto si no se com se arriba la direcció tal?, al router!
# route add default gw 192.168.1.124 eth0 # ip del router i tarja eth
# route -n

service apache2 restart
```

/etc/hosts

```
127.0.0.1    localhost
127.0.1.1    DS.localdomain  DS

172.18.3.100 www.gsx.ct      general defecte
172.18.3.100 www.cataleg.gsx.ct cataleg
172.18.3.100 www.productes.gsx.ct productes
172.18.3.200 www.botiga.gsx.ct  botiga
172.17.3.2   www.intranet.gsx intranet
```

The following lines are desirable for IPv6 capable hosts

```
::1          ip6-localhost ip6-loopback
fe00::0      ip6-localnet
ff00::0      ip6-mcastprefix
ff02::1      ip6-allnodes
ff02::2      ip6-allrouters
```

botiga-ssl

```
<IfModule mod_ssl.c>
<VirtualHost 172.18.3.200:443>
    ServerAdmin webmaster@localhost
    DocumentRoot /var/botiga

    <Directory />
        Options FollowSymLinks
        AllowOverride None
    </Directory>
    <Directory /var/botiga/>
        Options Indexes FollowSymLinks MultiViews
        AllowOverride None
        Order allow,deny
        allow from all
    </Directory>

    ScriptAlias /cgi-bin/ /usr/lib/cgi-bin/
    <Directory "/usr/lib/cgi-bin">
        AllowOverride None
        Options +ExecCGI -MultiViews +SymLinksIfOwnerMatch
        Order allow,deny
        Allow from all
    </Directory>
```

...

```
#!/bin/bash
```

```
echo ' maquina client-servidor-dmz or whatever...'
```

```
echo ' es fer lo de sempre '  
# configurar el fitxer etc/hosts      #  
cp FILES/hosts /etc/hosts
```

```
ethX=eth0 # targeta amb el qual es conecta al servidor
```

```
# configurar el fitxer etc/network/interfaces -> per treballar sols  
amb una interfície física per dhcp  
# pero n'hi agafem dues de virtuals amb una mac address explicita  
amida per que siguin hosts coneguts epl servidor DHCP
```

```
cp FILES/interfaces /etc/network/interfaces
```

```
ifconfig $ethX:0 172.18.3.100 netmask 255.254.0.0 # subxarxa dmz a  
ifconfig $ethX:1 172.18.3.200 netmask 255.254.0.0 # subxarxa dmz b  
# ifconfig $ethX:2 172.20.3.2 netmask 255.254.0.0 # subxarxa  
intranet # la web s'allotja aquí!
```

```
service apache2 restart  
# desconectem de xarxa i el lliguem al router  
# apaguem la maquina i la reengeguem com el mateix usuari -alumne  
# busquem els fitxers leases del client  
# comprovem si el nom di del nomi del pc han canviat  
# comprovem la connectivitat amb ping  
# comprovem que els servidor apache estan fucnionant correctament
```

```
# man interfaces /hwaddres
```

intranet

```
<VirtualHost 172.17.3.2:80>
  ServerAdmin webmaster@localhost
  ServerName www.intranet.gsx
  DocumentRoot /var/intranet
  <Directory />
    Options FollowSymLinks
    AllowOverride None
  </Directory>
  <Directory /var/intranet/>
    Options Indexes FollowSymLinks MultiViews
    AllowOverride None
    Order Deny,Allow
    Deny from all
    allow from 172.20
    allow from 127
  </Directory>

  ScriptAlias /cgi-bin/ /usr/lib/cgi-bin/
  <Directory "/usr/lib/cgi-bin">
    AllowOverride None
    Options +ExecCGI -MultiViews +SymLinksIfOwnerMatch
    Order allow,deny
    Allow from all
  </Directory>

  ErrorLog ${APACHE_LOG_DIR}/error.log

  # Possible values include: debug, info, notice, warn, error, crit,
  # alert, emerg.
  LogLevel warn

  CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

/etc/network/interfaces

```
auto lo
iface lo inet loopback

auto eth0
iface eth0 inet dhcp
```

```
#!/bin/bash

# inicialitzar els virtual hosts

echo ' maquina client-servidor-dmz or whatever...'

ethX=eth0 # targeta amb el qual es conecta al servidor

# configuració manual dels netmasks # afegir les adreces de manera
manual
# porque no m'he pogut aclararme amb el identificador de dhcp

ifconfig $ethX:0 192.168.1.100 netmask 255.255.255.0 # subxarxa dmz a
ifconfig $ethX:1 192.168.1.200 netmask 255.255.255.0 # subxarxa dmz b
ifconfig $ethX:2 172.17.1.2 netmask 255.254.0.0 # subxarxa intranet
# la web s'allotja aqui!

# inicialitzar apache... etc.

# extreure els hosts manualment de hosts

rm /etc/hosts
cp FILES/hosts /etc/
```

```
/etc/resolv.conf
domain gsx.ct
search gsx.ct
nameserver 192.168.147.2
```

```
/etc/hosts
127.0.0.1    localhost
127.0.1.1    DS.localdomain DS
```

```
# The following lines are desirable for IPv6 capable hosts
::1        ip6-localhost ip6-loopback
fe00::0    ip6-localnet
ff00::0    ip6-mcastprefix
ff02::1    ip6-allnodes
ff02::2    ip6-allrouters
```

```

#!/bin/bash

# pegar los fitxers a home/~/Desktop... directory /

[ ! `whoami` = 'root' ] && echo 'u have to run me as root!' && exit 1
# 1r afegir manualment

#####
rm /etc/hosts
cp FILES/hosts /etc/hosts # copiar les adreçes i enllaços
#####

# 2n afegir les adreçes virtuals
#####

# 3r matar el network manager

ps aux | grep Manager # mirar si existeix
./mata_automatic.sh # dir sisi

if [ $# -eq 1 ]
then
ethX=$1
eth_ip=$(ifconfig $ethX | sed -n '2p' | cut -c 21-35)
echo $eth_ip
# ha sigut necessari afegir manualment les IPs de la xarxa local a les
tauls de routing. Per exemple:
route add -net 192.168.3.0/24 gw $eth_ip dev $ethX #this is optional
depending on machine config and router
fi

/etc/hosts

```

```

127.0.0.1    localhost
127.0.1.1    dc.localdomain dc

192.168.3.100 www.gsx.ct general defecte
192.168.3.100 www.cataleg.gsx.ct cataleg
192.168.3.100 www.productes.gsx.ct productes
192.168.3.200 www.botiga.gsx.ct botiga
172.17.3.2   www.intranet.gsx intranet

# The following lines are desirable for IPv6 capable hosts
::1          ip6-localhost ip6-loopback
fe00::0      ip6-localnet
ff00::0      ip6-mcastprefix
ff02::1      ip6-allnodes
ff02::2      ip6-allrouters

```

```
#!/bin/bash

echo ' ROUTER

eth2      Link encap:Ethernet  HWaddr 00:1a:92:77:70:f4
          inet addr:10.21.6.6

'

[ `whoami` = 'root' ] || exit 1

# cal assignar a quina interfície esta conectat per cable el router i
# el servidor
if [ $# -eq 0 ]
then
ethX=$(mii-tool | head -n1 | cut -c1-4)
else
ethX=$1
fi

ethX='eth0' # forçem que sera la interfície eth0

# conectar cables mirar quina targeta...
# se pasara per parametre ela targe o manual
ifconfig $ethX 192.168.1.124 netmask 255.255.255.0
ifconfig $ethX:0 172.18.0.124 netmask 255.254.0.0
# ifconfig $ethX:1 172.20.0.124 netmask 255.254.0.0

#####
echo ' resetejar /etc/hosts
'
rm /etc/hosts
cp FILES/hosts /etc/

# mascara 172.16+8+4+2/15
# 172.30/15
# subneting 0.00000000.00000000
# 1r # 172.18.0.1 --> intranet general
# 2n # 172.18.0.2 --> servidor

# sudo iptables -L -nv -t nat
# matar los network deamons
./mata_automatic.sh
# enable forwarding
echo "1" > /proc/sys/net/ipv4/ip_forward
sysctl -p /etc/sysctl.conf
# postrouting --> donar acces internet al servidor

# iptables -t nat -A POSTROUTING -o eth2 -j MASQUERADE
# iptables -t nat -A POSTROUTING -p tcp -o eth0 -j SNAT --to-source
# 192.168.1.0-194.236.50.160:1024-32000

# donar accés a internet al DMZ
# SNAT -> source network addresss translator / convierte la ip font
iptables -t nat -A POSTROUTING -s 192.168.1/24 -d 0/0 -o eth2 -j
MASQUERADE
# delete specfic table all
# iptables -t @@@ --flush
```

```
# delete rules form iptables
# iptables -t nat -D POSTROUTING 1

# list ipatbles
# iptables -L -nv -t nat
# restart counter from iptables
# iptables -t nat -Z

# DNAT -> destination network address translator / conviete la ip
destino

# iptables -t nat -A PREROUTING -i eth2 -d 192.168.1.124 --dport 80 -j
DNAT --to-destination 192.168.1.123
# iptables -t nat -D PREROUTING 1
# iptables -t nat -A PREROUTING -p tcp -d 10.10.20.99 --dport 80 -j
DNAT --to-destination 10.10.14.2

# iptables -t nat -A PREROUTING -i eth2 -d 10.21.6.5 -p tcp --dport 80
-j DNAT --to-destination 192.168.1.123

# redirecció de les peticions dirigides al DMZ per el router
ip_serverDMZ='192.168.1.123'
ethInternet='eth2'
eth_ip=$(ifconfig $ethInternet | sed -n '2p' | cut -c 21-35)
iptables -t nat -A PREROUTING -i $ethInternet -d $eth_ip -p tcp --
dport 80 -j DNAT --to-destination $ip_serverDMZ

service apache2 restart
```

```
/etc/hosts
```

```
127.0.0.1    localhost
127.0.1.1    dc.localdomain  dc

172.18.3.100 www.gsx.ct general defecte
172.18.3.100 www.cataleg.gsx.ct cataleg
172.18.3.100 www.productes.gsx.ct productes
172.18.3.200 www.botiga.gsx.ct botiga
172.17.3.2   www.intranet.gsx intranet
```

```
# The following lines are desirable for IPv6 capable hosts
::1        ip6-localhost ip6-loopback
fe00::0    ip6-localnet
ff00::0    ip6-mcastprefix
ff02::1    ip6-allnodes
ff02::2    ip6-allrouters
```

```

#!/bin/bash

[ `whoami` = 'root' ] || exit 1
echo ' log de la practica 9 -> servei DHCP '

#####
#####
# matem la configuració automàtica per a que no ens sobreescrigui la
nostra ##
./mata_automatic.sh ##
# activem el routing, la SNAT i la DNAT al PC de l'esquerra.
##
# routing ##
echo "1" > /proc/sys/net/ipv4/ip_forward ##
sysctl -p /etc/sysctl.conf ##
# source network address translator ##
iptables -t nat -A POSTROUTING -o eth2 -j MASQUERADE ##
# destination network address translator ##
iptables -t nat -A POSTROUTING -s 192.168.147/24 -d 0/0 -o eth2 -j
MASQUERADE ##
# -s local network mask ##
#####
#####
# configurar una connexió per dins del rang de subxarxes del INTRANET
ifconfig eth3 172.20.0.2 netmask 255.254.0.0
# afegir entrada en la taula de routing
# route add -net 172.20.0.0/15 gw 172.20.0.2 dev eth3
#####
#####
# configurem els servidors DHCP (ROUTER) ##
# per a que assigni adreces IP a les tres subxarxes que tenim:
##
# modificar archivo /etc/dhcp/dhcpd.conf
cp CONFIG/dhcpd.conf /etc/dhcp/
# reiniciar el dimoni de dhcp
service isc-dhcp-server restart
#####
#####

# cal realitzar un backup
# cal configurar la xarxa per la intranet

```

```

/etc/network/interfaces

```

```

# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

```

```

# The loopback network interface
auto lo
iface lo inet loopback

```

```

# The primary network interface
allow-hotplug eth0
#NetworkManager#iface eth0 inet dhcp

```

```

auto eth0:1 iface eth0:1
inet dhcp
client 01:AA:BB:CC:DD:EE:FF:02 # MAC=AA:BB:CC:DD:EE:FF:01

```

```
/etc/dhcp/dhcpd.conf
```

```
ddns-update-style none;

default-lease-time 600;
max-lease-time 7200;

# If this DHCP server is the official DHCP server for the local
# network, the authoritative directive should be uncommented.
authoritative;

# Configuracio DMZ: #####
subnet 192.168.1.0 netmask 255.255.255.0 {
    interface eth0;
    range 192.168.1.123 192.168.1.234;      # range of ip addrss to be
issued to dhcp clients
    option subnet-mask 255.255.255.0;      # default subnet mask to
be used by dhcp clients
    option broadcast-address 192.168.1.255; # default
broadcastaddress to be used by dhcp clients
    option routers 192.168.1.124;          # default gateway to be
used by dhcpp clients
    option domain-name-servers ns.gsx.ct;  # default dns to be used
by dhcp clients
    option domain-name "gsx.ct";           # default domain name for
the client

    default-lease-time 604800; # time in secs that a client may keep
the ip address -> 1 week
    max-lease-time 691200;

    # dhcp requests are not forwarded. aplies when there is more than
one ehternet device and forwading is configured

    # -> eth0 mac: 00:0c:29:02:31:ca
    # fitxer /etc/dhcp/dhcpd.conf
    host server1 { # sumxarxa dels enllaç
        hardware ethernet 00:0c:29:02:31:ca;
        option dhcp-client-identifier 01:00:0c:29:02:31:ca; # adreça
media address controller conegut -> eth0 del DMZ
        fixed-address 192.168.1.123;
    }
}

#####
# Configuracio INTRANET: #####
subnet 172.20.0.0 netmask 255.254.0.0 {

    interface eth3;
    range 172.20.1.123 172.20.1.223;      # s'assignen ips
dins d'aquest rang d'adreçes
    option subnet-mask 255.254.0.0;
    option broadcast-address 172.21.255.255;
    option routers 172.20.0.2;
    option domain-name-servers intranet.ct;
    option domain-name "intranet-client.ct";
    max-lease-time 28800; # 604800 sg = una setmana
    default-lease-time 7200; # sobreposa al global
}
```

```

#!/bin/bash

echo ' m'has d'executar amb permisos root '
[ `whoami` = 'root' ] || exit 1

echo ' hola, soc el router '

#####
#####
# matem la config auto per a que no ens sobreescrigui la nostra
##
./mata_automatic.sh

# configurar una connexió per dins del rang de subxarxes del
SERVIDOR/DMZ
ifconfig eth0 192.168.1.124 netmask 255.255.255.0
ifconfig eth0:0 172.17.1.124 netmask 255.254.0.0
ifconfig eth0:1 192.18.1.124 netmask 255.255.255.0

# configurar una connexió per dins del rang de subxarxes del INTRANET
ifconfig eth3 172.20.0.2 netmask 255.254.0.0

echo ' activem el routing, la SNAT, la DNAT, i el DHCP del PC esquerra
(¿clients de la intranet?) '

#####
#####
# activem el routing                                ##
echo "1" > /proc/sys/net/ipv4/ip_forward      # activar el servei de
forwarding ...
sysctl -p /etc/sysctl.conf
# source network address translator                ##
iptables -t nat -A POSTROUTING -o eth2 -j MASQUERADE                ##
# destination network address translator            ##
iptables -t nat -A POSTROUTING -s 192.168.147/24 -d 0/0 -o eth2 -j
MASQUERADE    ##
# dhcp
cp FILES/dhcpd.conf /etc/dhcp/

echo ' comprovem que els paquets son al sistema '

#####
#####
#apt-get install bind9                                ##
#apt-get install bind9-doc
#apt-get install dnsutils

echo ' configurem els servidors DNS '

#####
#####
# editem el fitxer /etc/bind/named.conf.local        ##
# hi afegim les zones :
#   # gsx.ct      # dmz
#   # intranet.gsx # intranets
# hi agegim 3 zones inverses
#   # -> porque en les intranets hem fet subneting i ara no podem
partir els bytes..

rm /etc/bind/named.conf.local

```



```
cp FILES/named.conf.local /etc/bind/

# actualitzar fitxer de configuració
rm /etc/bind/named.conf.options
cp FILES/named.conf.options /etc/bind/      # editem el fitxer
d'opcions globals...

# restart bind
/etc/init.d/bind9 restart

# by this point, if you "dig" a domain name multiple times you should
# see a drastic improvement in the Query time:
# between the first and second query. this is due to the server
# caching the query.

#####
#####
# PRIMARY MASTER SERVER CONFIGURATION                                ##
### use a existing zone file as a template....
### cp /etc/bind/db.local /etc/bind/db.gsx.ct
### edit the new zone file
### db.gsx.ct -> changing localhost. to the FQDN of the server

rm /etc/bind/*gsx*
cp FILES/*gsx* /etc/bind/      # copiar els fitxers de zones en el
directori de configuració de BIND

# after edit restart again
/etc/init.d/bind9 restart

# now that the zone file is setup and resolving names to IP @ a
# reverse zone is also required
# a reverse zone allows DNS to convert from an address to a name

# edit /etc/bind/named.conf.local
# replace the ip with the first three octets of whatever private
# network you are using

# now create the db.192 file xD --> db.172

chown bind. /var/cache/bind/*

/etc/init.d/bind restart
/etc/init.d/isc-dhcp-server restart

# esborrar les entrades de /etc/hosts

rm /etc/hosts
cp FILES/hosts /etc/

rm /etc/resolv.conf
cp FILES/resolv.conf /etc/

# ultima sessió
# restart bind9
# service bind9 restart

# debug bind9
named -u bind -4 -f -g -d 3
```

/etc/resolv.conf

```
# Generated by NetworkManager
domain localdomain
search localdomain
nameserver 192.168.1.124
```

/etc/bind/named.conf.options

```
options {
    directory "/var/cache/bind";

    // If there is a firewall between you and nameservers you want
    // to talk to, you may need to fix the firewall to allow multiple
    // ports to talk.  See http://www.kb.cert.org/vuls/id/800113

    // If your ISP provided one or more IP addresses for stable
    // nameservers, you probably want to use them as forwarders.
    // Uncomment the following block, and insert the addresses
    replacing
    // the all-0's placeholder.
    // nameserver 192.168.147.2

    forwarders {
//      0.0.0.0;          // cal ficar el router de la urv... ip dns urv
// aqui
        192.168.147.2;
    };

    auth-nxdomain no;      # conform to RFC1035
    listen-on-v6 { any; };

    // negar la tranferencia de oznes
    allow-transfer {
        "none";
    };

    // només permetre crides recursives desde la intranet.
    allow-recursion {
        172.20.0.0/15;
    };
};
```

```
/etc/bind/named.conf.local
```

```
//
// Do any local configuration here
//

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";
```

```
////////////////////////////////////
// zona per la DMZ           // ZONA 1 //
// ZONA DMZ
zone "gsx.ct" {
    type master;
    file "/etc/bind/db.gsx.ct";
};
// ZONA DMZ REVERSE
zone "1.168.192.in-addr.arpa" {
    type master;
    file "/etc/bind/dbi.gsx.general";
};
```

```
////////////////////////////////////
// zona per les INTRANETS    // ZONA 2 //
// ZONA INTRANET
zone "intranet.gsx" {
    type master;
    file "/etc/bind/db.intranet.gsx";
};

// ZONA INTRANET REVERSE
zone "20.172.in-addr-arpa" {
    type master;
    file "/etc/bind/dbi.intranet.gsx.20";
};
// ZONA INTRANET REVERSE
zone "18.172.in-addr-arpa" {
    type master;
    file "/etc/bind/dbi.intranet.gsx.18";
};
//
```

```
/etc/hosts
```

```
127.0.0.1    localhost
127.0.1.1    dc.localdomain  dc

# The following lines are desirable for IPv6 capable hosts
::1          ip6-localhost ip6-loopback
fe00::0      ip6-localnet
ff00::0      ip6-mcastprefix
ff02::1      ip6-allnodes
ff02::2      ip6-allrouters
```

/etc/bind/dbi.gsx.general

```
; BIND reverse data file for empty rfc1918 zone
;
; DO NOT EDIT THIS FILE - it is used for multiple zones.
; Instead, copy it, edit named.conf, and use that copy.
;
$TTL      86400
@      IN      SOA      dc.gsx.ct. root.gsx.ct. (
                        2405201304      ; Serial
                        604800      ; Refresh
                        86400      ; Retry
                        2419200      ; Expire
                        86400 )      ; Negative Cache TTL
;
@      IN      NS       dc.
100    IN      PTR      dc.gsx.ct.
;      IN      MX       10      mail.gsx.ct.

; list ALL other computers
100      IN      PTR      www.gsx.ct.
100      IN      PTR      www.cataleg.gsx.ct.
100      IN      PTR      www.productes.gsx.ct.
200      IN      PTR      www.botiga.gsx.ct.

; load balancing
;general      IN      A      192.168.1.100
;cataleg      IN      A      192.168.1.100
;productes    IN      A      192.168.1.100
;botiga       IN      A      192.168.1.200
```

/etc/bind/db.gsx.ct

```
; BIND reverse data file for empty rfc1918 zone
;
; DO NOT EDIT THIS FILE - it is used for multiple zones.
; Instead, copy it, edit named.conf, and use that copy.
;
$TTL      86400
@      IN      SOA      dc.gsx.ct. root.gsx.ct. (
                        2405201301      ; Serial
                        604800      ; Refresh
                        86400      ; Retry
                        2419200      ; Expire
                        86400 )      ; Negative Cache TTL
;
@      IN      NS      dc.gsx.ct.
;      IN      MX 10      mail.gsx.ct.
dc      IN      A      192.168.1.100

; list ALL other computers
www      IN      A      192.168.1.100
general      IN      A      192.168.1.100
cataleg      IN      A      192.168.1.100
productes      IN      A      192.168.1.100
botiga      IN      A      192.168.1.200

; load balancing
;192.168.1.100 www.gsx.ct general defecte
;192.168.1.100 www.cataleg.gsx.ct cataleg
;192.168.1.100 www.productes.gsx.ct productes
;192.168.1.200 www.botiga.gsx.ct botiga
;172.17.1.2 www.intranet.gsx intranet
```

```
#!/bin/bash
```

```
echo ' practica 9 GSX - servidor DHCP , apartat client-Intranet'
```

```
rm /etc/network/interfaces
```

```
cp FILES/interfaces /etc/network/
```

```
rm /etc/hosts
```

```
cp FILES/hosts /etc/
```

/etc/hosts

```
127.0.0.1    localhost
```

```
127.0.1.1    DI
```

```
172.18.3.100 www.gsx.ct          general defecte
```

```
172.18.3.100 www.cataleg.gsx.ct      cataleg
```

```
172.18.3.100 www.productes.gsx.ct   productes
```

```
172.18.3.200 www.botiga.gsx.ct       botiga
```

```
172.20.3.2   www.intranet.gsx       intranet
```

```
# The following lines are desirable for IPv6 capable hosts
```

```
::1          localhost ip6-localhost ip6-loopback
```

```
ff02::1     ip6-allnodes
```

```
ff02::2     ip6-allrouters
```

/etc/network/interfaces

```
auto lo
```

```
iface lo inet loopback
```

```
auto eth0
```

```
iface eth0 inet dhcp
```

```
#!/bin/bash
```

```
echo ' Pràctica 10 GSX INTRANET '  
# matar lo toto!
```

```
rm /etc/hosts  
cp FILES/hosts /etc
```

```
/etc/hosts
```

```
127.0.0.1    localhost  
127.0.1.1    DI
```

```
# The following lines are desirable for IPv6 capable hosts  
::1         localhost ip6-localhost ip6-loopback  
ff02::1     ip6-allnodes  
ff02::2     ip6-allrouters
```