LIN: SSH, DNS, DHCP and network configuration on OpenSuse Linux

Installation of necessary packages

```
sudo zypper install openssh
sudo zypper install dhcp-server
sudo zypper install bind
```

SSH configuration

```
sudo systemctl start sshd
sudo systemctl enable sshd
sudo systemctl status sshd

sudo firewall-cmd --add-service=ssh --permanent
sudo firewall-cmd --reload

ssh username@hostname_or_ip_address
```

YaST network configuration

```
sudo YaST
```

DHCP configuration

```
sudo nano /etc/dhcp/dhcpd.conf

default-lease-time 600;          # 10 minutes
max-lease-time 7200;             # 2  hours

option domain-name "example.com";
option domain-name-servers 192.168.1.116;
option broadcast-address 192.168.2.255;
option routers 192.168.2.1;
option subnet-mask 255.255.255.0;

subnet 192.168.2.0 netmask 255.255.255.0
 {
   range 192.168.2.10 192.168.2.20;
   range 192.168.2.100 192.168.2.200;
```

```
 }

sudo nano /etc/sysconfig/dhcpd

DHCPD_INTERFACE="eth0"   # Replace with your actual interface name

sudo systemctl start dhcpd
sudo systemctl enable dhcpd
sudo systemctl status dhcpd

sudo firewall-cmd --add-service=dhcp --permanent
sudo firewall-cmd --reload
```

DNS configuration

```
sudo nano /etc/named.conf

options {
    directory "/var/lib/named";
    allow-query { any; };
    recursion no;   # Set to 'yes' if you want to allow recursive queries
};


zone "example.com" {
    type master;
    file "example.com.zone";
};

sudo nano /var/lib/named/example.com.zone
```

```
$TTL 86400
@   IN  SOA ns.example.com. admin.example.com. (
        2025092601 ; Serial
        3600        ; Refresh
        1800        ; Retry
        604800      ; Expire
        86400       ; Negative Cache TTL
)

; Name servers
@   IN  NS  ns.example.com.

; A records
ns  IN  A   192.168.1.10  ; Replace with your server's IP
@   IN  A   192.168.1.10  ; Replace with your server's IP
www IN  A   192.168.1.10  ; Replace with your server's IP
```

```
sudo chown named:named /var/lib/named/example.com.zone
```

```
sudo systemctl start named
sudo systemctl enable named
sudo systemctl status named

sudo firewall-cmd --add-service=dns --permanent
sudo firewall-cmd --reload

dig @192.168.1.10 example.com
```