

Example: Complete DHCP Server Configuration

Configure vMX as DHCP router and client PC connected to vMX will obtain DHCP IP from vMX (DHCP Server).

```
ge-0/0/5 {  
  unit 0 {  
    family inet {  
      address 192.168.101.1/24;  
    }  
  }  
}
```

```
[edit system services]  
root@R1# show  
dhcp-local-server {  
  group g1 {  
    interface ge-0/0/5.0;  
  }  
}  
  
[edit access]  
root@R1# show  
address-assignment {  
  ##  
  ## Warning: requires 'subscriber-address-assignment' license  
  ##  
  pool p1 {  
    family inet {  
      network 192.168.101.0/24;  
      range r1 {  
        low 192.168.101.2;  
        high 192.168.101.254;  
      }  
      dhcp-attributes {  
        maximum-lease-time 2419200;  
        name-server {  
          192.168.101.1;  
        }  
      }  
    }  
  }  
}
```

CLIENT-PC:

```
H1> ip dhcp  
DORA IP 192.168.101.2/24 GW 192.168.101.1  
  
H1> show ip  
  
NAME          : H1[1]  
IP/MASK       : 192.168.101.2/24  
GATEWAY       : 192.168.101.1  
DNS           : 192.168.101.1  
DHCP SERVER   : 192.168.101.1  
DHCP LEASE    : 2418840, 2419200/1209600/2116800  
DOMAIN NAME   : example.com  
MAC           : 00:50:79:66:68:16  
LPORT        : 20000  
RHOST:PORT    : 127.0.0.1:30000  
MTU           : 1500
```

Verification:

```
root@R1> show dhcp server binding detail
```

```
Client IP Address: 192.168.101.2
  Hardware Address: 00:50:79:66:68:16
  State: BOUND(LOCAL_SERVER_STATE_BOUND)
  Lease Expires: 2020-03-25 17:51:49 UTC
  Lease Expires in: 2418708 seconds
  Lease Start: 2020-02-26 17:51:48 UTC
  Last Packet Received: 2020-02-26 17:51:49 UTC
  Incoming Client Interface: ge-0/0/5.0
  Server Identifier: 192.168.101.1
  Session Id: 1
  Client Pool Name: p1
```

*/** Additional Theory **/*

The following is an example of a pool configuration.

```
[edit system services dhcp]
pool 10.3.3.0/24 {
address-range low 10.3.3.2 high 10.3.3.254;
exclude-address {
10.3.3.33;
}
}
```

The following is an example of a static binding configuration:

```
[edit system services dhcp]
static-binding 00:0d:56:f4:01:ab {
fixed-address {
10.5.5.5;
10.6.6.6;
}
host-name "another-host.domain.tld";
client-identifier hexadecimal 01001122aabbcc;
}
```

To configure a boot file and boot server, include the `boot-file` and `boot-server` statements:

```
boot-file filename;
boot-server (address | hostname);
```

The following example specifies a boot file and server for an address pool:

```
[edit system services dhcp]
pool 10.4.4.0/24 {
boot-file "boot.client";
boot-server 10.4.4.1;
}
```