



[Translation\(s\): 한국어](#)

Ordinarily, the [DebianMan: resolv.conf\(5\)](#) file is managed dynamically by various network service daemons. This is the default, and is intended for laptops and other highly mobile systems which may connect to different networks. It also works well for many desktop and server systems, so long as the network infrastructure is perfect.

For some systems, on some networks, the system administrator may wish to configure `/etc/resolv.conf` by hand. This leads to a conflict between the administrator's changes, and the dynamic changes performed by the network service daemons.

If you edit `resolv.conf` by hand, and need to stop daemons from overwriting your changes, this page documents some of your options.

Configuring resolvconf

The [DebianPkg: resolvconf](#) package may be installed. When it is, it includes various configuration files for other package (such as [DebianPkg: isc-dhcp-client](#)). Specifically, `resolvconf` includes a file which modifies the `make_resolv_conf` shell function used by [DebianMan: dhclient-script\(8\)](#).

With `resolvconf` installed, you can tell it to *do nothing* whenever some daemon tries to modify `resolv.conf`, by putting **`resolvconf=NO`** in the `/etc/resolvconf.conf` file. (Note: this is *not* the `/etc/resolv.conf` file!)

Alternatively, you can use `dns-nameserver` entries in the appropriate stanza in `/etc/network/interfaces`:

```
iface eth0 inet static
    address 192.168.1.3
    netmask 255.255.255.0
    gateway 192.168.1.1
    dns-nameserver 192.168.1.254
    dns-nameserver 8.8.8.8
    dns-search foo.org bar.com
```

Configuring dhclient

The most common daemon which overwrites `resolv.conf` is [DebianMan: dhclient\(8\)](#) (from [DebianPkg: isc-dhcp-client](#)). In many cases, simply stopping this *one* daemon from touching the file will suffice.

Stop dhclient from modifying /etc/resolv.conf

Another approach makes use of `dhclient-script`'s hook scripts. According to [DebianMan: dhclient-script\(8\)](#):

When it starts, the client script first defines a shell function, `make_resolv_conf`, which is later used to create the `/etc/resolv.conf` file. To override the default behaviour, redefine this function in the enter hook script.

Therefore, we can stop `dhclient` from overwriting `resolv.conf` by doing the following:

```
echo 'make_resolv_conf() { ;; }' > /etc/dhcp/dhclient-enter-h
chmod 755 /etc/dhcp/dhclient-enter-hooks.d/leave_my_resolv_co
```

The execute bit is required because `dhclient-script` uses [DebianMan: run-parts\(8\)](#) to decide which files to read. For that same reason, the filename *must not* contain anything but letters, digits, underscores and hyphens.

Modifying /etc/dhcp/dhclient.conf

The `/etc/dhcp/dhclient.conf` file can be populated with directives that will override the options sent by the DHCP server. For example, these directives will override the domain, search, and nameserver parameters that are placed into `/etc/resolv.conf`:

```
supersede domain-name "example.com";
supersede domain-search "example.com";
supersede domain-name-servers 127.0.0.1;
```

Another option is to remove "domain-name, domain-name-servers, domain-search" from the request line. However, this only works on **some** networks, and not on others. If the DHCP server sends unsolicited domain-name-servers (et al.) responses, `dhclient` will still heed them, and will still overwrite the `resolv.conf` file.

Making /etc/resolv.conf immutable

This approach will render `/etc/resolv.conf` immutable so that it cannot be changed, regardless of what packages are installed or what tries to modify it.

```
rm -f /etc/resolv.conf
editor /etc/resolv.conf
chattr +i /etc/resolv.conf
```

Obviously, you will need to put the appropriate content into the file *before* setting the immutable bit. Any time you wish to change the file, you will have to remove the bit, make your change, and then restore the bit.

A consequence of making `/etc/resolv.conf` immutable is that if `dhclient-script` tries to change it and fails, it clutters `/etc` with temporary files. See [Open: #860928: dnssec-trigger + isc-dhcp-client: /etc/ being cluttered with tons of resolv.conf.dhclient-new.* files: 860928](#) for details. The user/admin may need to periodically clean these files out of `/etc` until #860928 is fixed.

[CategoryNetwork](#)