

# DHCP client configuration in multiservice mode

On the VP series, it is possible to configure options received by DHCP clients on various interfaces.

Distribution of requested options while multiservice mode:

Option	Only Internet interface	Internet + VoIP	
		Internet	VoIP
1 = Subnet Mask	+	+	+
3 = Router	+	+	+
6 = Domain Name Server	+	+	+
12 = Host Name	+	+	-
15 = Domain Name	+	+	-
26 = Interface MTU	+	+	+
28 = Broadcast Address	+	+	+
33 = Static Route	+	+	+
42 = Network Time Protocol Servers	+	+	-
43 = Vendor-Specific Information	+	+	-
66 = TFTP Server Name	+	+	-
67 = Bootfile name	+	+	-
120 = SIP Servers	+	-	+
121 = Classless Static Route	+	+	+
249 = Private/Classless Static Route (Microsoft)	+	+	+

According to the table above, options 1, 3, 6, 26, 28, 33, 121, 249 can be requested by dhcp clients for each sub-interface. These options will be individually applied to each interface. Options 12, 15, 42, 43, 66, 67, 120 can be requested and applied only to one dhcp client because of they are system-wide settings and do not result in network interface configuration.

Configuration of the list of requested options may be changed. Configuration is saved into the configuration file `/et/config/cfg.yaml` like all other settings. List of options is not specified by default (DHCPOptionList: "" is a record example in configuration), it means options are requested and applied according to the table above.

## Configuration editing methods

### I. Using vi editor.

1. Internet interface option list is specified by DHCPOptionList parameter in Internet=>Network section.
2. VoIP interface option list is specified by DHCPOptionList in Voip=>Network section.

After editing and saving in **vi** editor, execute the following commands:

- **reloadcfg** – applies reconfiguration, the command result should be "Configuration accepted".
- **save** – saves reconfiguration into non-volatile memory.



You can execute `save` command only if the previous command has been executed successfully. `Save` command is forbidden if the result of `reloadcfg` command execution was message "Configuration not accepted".

### II. Using setconf command



This method is recommended and obviates the need of executing `reloadcfg` and `save` commands.

This method is recommended and obviates the need of executing `reloadcfg` and `save` commands. Use `getconf` (display the current information) and `setconf` (set the parameter value) commands.

**Example 1.** It is necessary to obtain DHCPOptionList value:

- for Internet interface  
`getconf Internet.Network | grep DHCPOptionList`
- for VoIP interface  
`getconf Voip.Network | grep DHCPOptionList`

**Example 2.** It is necessary to specify some option list:

- for Internet interface  
setconf Internet.Network DHCPOptionList "3,6,26,28,33,121,249,12"
- for VoIP interface (assigning option list by default)  
setconf Voip.Network DHCPOptionList "

### III. Configuring on a PC



We do not recommend this method.

If you use this method for changing configuration, proceed as follows:

1. Downloads configuration from the device on a computer.
2. Specify values of new parameters and save them.
3. Download configuration back on the device.

#### DHCPOptionList rules editing

1. Valid values: 3,6,12,15,26,28,33,42,43,66,67,120,121,249;
2. Options in DHCPOptionList parameter are comma-separated without space between them, for example, DHCPOptionList: "3,6,12,15,26,120,121";
3. Sequence order of options in DHCPOptionList does not matter;
4. Each option (options 12, 15, 42, 43, 66, 67, 120) may be requested and applied only from one interface;
5. Options 1, 3, 6, 26, 28, 33, 121, 249 may be requested by dhcp clients for each subinterface;
6. Options 66 and 67 must be specified on the same interface;
7. If DHCPOptionList is empty, list of options requested by default will be used (take into account section 8);
8. If options specified in DHCPOptionList (see rule 4) are requested from another interface where DHCPOptionList is empty, these options will be requested from the first interface and will be excluded from the second interface of the default option list;
9. If option list is specified for interface in DHCPOptionList, these options will be requested only;
10. Option 1 can not be specified in DHCPOptionList. This option is always requested and applied from all interfaces regardless of other settings.

If any of the paragraphs is violated, you will see message "Configuration not accepted" after an attempt to apply configuration. You can find an error if *confi* *gd*/logs are enabled. In this case, when applying configuration is unsuccessful you can view the reason why in details.



Reboot the device after editing DHCPOptionList. Before rebooting, proper device operation is not guaranteed.