## Template:Networking rut2xx manual setup wizard lan

## **LAN**

The **LAN** section is used to configure the router's local area network (LAN) and DHCP server settings. A DHCP (Dynamic Host Configuration Protocol) server can automatically configure the TCP/IP settings for any device that requests such a service. If you connect a device that has been configured to obtain an IP address automatically, the DHCP server will lease out an IP address from the available IP pool and the device will be able to communicate within the router's private network.

[[File:{{file\_lan}}}]]

Field	Value	Description
IP address	ip; default: <b>192.168.1.1</b>	The LAN interface's IPv4 address. An IP address identifies a device on a network and allows it to communicate with other devices
Netmask	netmask; default: <b>255.255.255.0</b>	A <u>netmask</u> is used to define how "large" a network is by specifying which part of the IP address denotes the network and which part denotes the device
IPv6 Prefix Length	ip; Default: <b>60</b>	Delegates a prefix length for this interface
<b>ULA Prefix</b>	ip; Default: " "	Prefix used for the Unique Local Address
DHCPv6 server	Enabled   Relayed   Disabled; default: <b>Enabled</b>	State of DHCPv6 server
RA server	Enabled   Relayed   Disabled; default: <b>Enabled</b>	State of Router Advertisement server
NDP server	Enabled   Relayed   Disabled; default: <b>Enabled</b>	State of the Neighbour Discovery Protocol server
Enable DHCP	off   on; default: <b>on</b>	Turns the DHCP server on or off
Start	integer [1255]; default: <b>100</b>	The starting IP address value. e.g., if your router's LAN IP is $192.168.1.1$ and your subnet mask is $255.255.255.0$ that means that in your network a valid IP address has to be in the range of $[192.168.1.0192.168.1.254]$ ( $192.168.1.255$ is a special unavailable address). If the Start value is set to $100$ then the DHCP server will only lease out addresses starting from $192.168.1.100$

Limit	integer [1255]; default: <b>150</b>	How many addresses the DHCP server can lease out. Continuing from the example above: if the start address is $192.168.1.100$ and the server can lease out $150$ addresses, available addresses will be from $192.168.1.100$ to $192.168.1.249$ ( $100 + 150 - 1 = 249$ ); this is because the first address is inclusive)
Lease time	interger [2999999]; default: <b>12</b>	A DHCP lease will expire after the amount of time specified in this field and the device that was using the lease will have to request a new one. However, if the device stays connected, its lease will be renewed after half of the specified amount of time passes (e.g., if lease time is 12 hours, then every 6 hours the device will ask the DHCP server to renew its lease). The minimal amount of time that can be specified is 2 minutes
Units	Hours   Minutes; default: <b>Hours</b>	Lease time measuring units

If you wish to set the router's LAN and DHCP settings later instead, you can do so via the  $Network \rightarrow [[\{\{\{name\}\}\}\}\ LAN|LAN]]$  page.