



Configuring the KlasRouter Ethernet LAN

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The information in this article applies to:

- o KlasRouter v2.0

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1.0 Introduction

KlasRouter contains an eight-port Fast Ethernet switch, also known as the Ethernet LAN. This switch is located on the rear of the KlasRouter and up to eight PCs can be plugged into the RJ-45 ports for Layer 2 Switching. There are two steps to configuring the Ethernet LAN. The first step configures the IP address and subnet mask for the Ethernet switch and the second step configures the Dynamic Host Control Protocol (DHCP) settings for assigning dynamic IP addresses to the computers connected to the Ethernet ports. The following paragraphs address each step in detail.

2.0 Configuration of KlasRouter

2.1 Cable Connections

Prior to beginning, ensure the following cable connections have been properly secured:

1. Power cord is plugged in and KlasRouter is on.
2. Control Port Cable is connected to the PCs serial port.
3. Control Port Cable is connected to the 'Control' port on the front of the KlasRouter.
4. RJ-45 Ethernet cable connecting a PC to one of the KlasRouter Ethernet LAN ports.

2.2 Establishing a HyperTerminal Session

To configure the KlasRouter, you must establish a HyperTerminal Session between a PC and the KlasRouter. Follow the instructions in **KlasRouter Application Note xxxx** to successfully establish a HyperTerminal Session and open the KlasRouter Main Configuration Menu.

2.3 Configuring the Ethernet LAN IP Address

1. Enter '3' on the Main Configuration Menu to start the Ethernet LAN Configuration Menu.

```
#####
# Welcome to KlasRouter #
#####

****Configuration Menu****

1) Show Running Configuration
2) Serial WAN
3) Ethernet LAN
4) Ethernet WAN
5) Routing
6) Voice over IP
7) Advanced Configuration
8) Diagnostics and Utilities
9) Profiles
Press 'x' to Logout

Enter Option>3
```

Figure 1. Entering the Ethernet LAN Configuration Menu

2. Enter '1' on the LAN Configuration Menu to display the existing LAN and DHCP configuration. (**Note: the default IP address and subnet mask of the Ethernet LAN is 192.168.1.1/24 with DHCP enabled.**)
3. Press 'Enter' to return to the LAN Configuration Menu.
4. Enter '3' in order to configure the Ethernet LAN.
5. You will be prompted to enter the LAN IP Address/Mask. Following the example from Figure 2 below, the Ethernet LAN IP Address is 192.168.1.1/24. Enter the IP address and subnet mask using decimal notation by typing '192.168.1.1/24.'
(**Note: Your configuration may use a different IP address and subnet mask.**)

```
LAN Configuration Menu
-----

1) Display LAN/DHCP Configuration
2) Set LAN and DHCP to Default Settings
3) Configure LAN
4) Configure DHCP
5) Start DHCP
6) Stop DHCP
7) VLAN Configuration
Press 'x' to Return

Enter Option>

Enter LAN IP Address/Mask ('q' to quit)>192.168.1.1/24

Configuring Ethernet LAN ... OK.

Press Enter to return to LAN Configuration Menu
```

Figure 2. Configure the Ethernet LAN IP Address

6. Press 'Enter' to return to the LAN Configuration Menu.

Configuring the KlasRouter Ethernet LAN

2.4 Configuring DHCP on the Ethernet LAN

1. Enter '4' on the LAN Configuration Menu to configure DHCP.
2. You will then be prompted to enter the DHCP Range, as shown in Figure 3 below. The DHCP Range represents a pool of unused IP addresses the KlasRouter can pick from to assign a connected computer. As shown below, the IP addresses must be sequential and be in the same IP subnet as the Ethernet LAN.

```

LAN Configuration Menu
-----
1) Display LAN/DHCP Configuration
2) Set LAN and DHCP to Default Settings
3) Configure LAN
4) Configure DHCP
5) Start DHCP
6) Stop DHCP
7) VLAN Configuration
Press 'x' to Return

Enter Option>

Current Subnet: 192.168.1.0/24
Enter DHCP IP Address Range ( eg 192.168.2.5/192.168.2.88 ) ('q' to
quit)>192.168.1.2/192.168.1.10

Starting DHCP Server ... OK.

Press Enter to return to LAN Configuration Menu

```

Figure 3. Configure DHCP on the Ethernet LAN

3. Press 'Enter' to return to the LAN Configuration Menu.

You can use the LAN Configuration Menu to verify the LAN or DHCP Configuration at any time. Additionally, you can start or stop DHCP manually by pressing '5' to start DHCP or '6' to stop DHCP.

MORE INFORMATION

For more information about KlasRouter and other Klas products, visit the following Klas website:

<www.klasonline.com>

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