4562 Converged Networking Router

Quick Start Guide

Version 1.0

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Before You Start

Please read this guide thoroughly as it describes the basic installation of the device. Additional configuration needed to deploy the device in a specific environment can be performed with the help of online help.

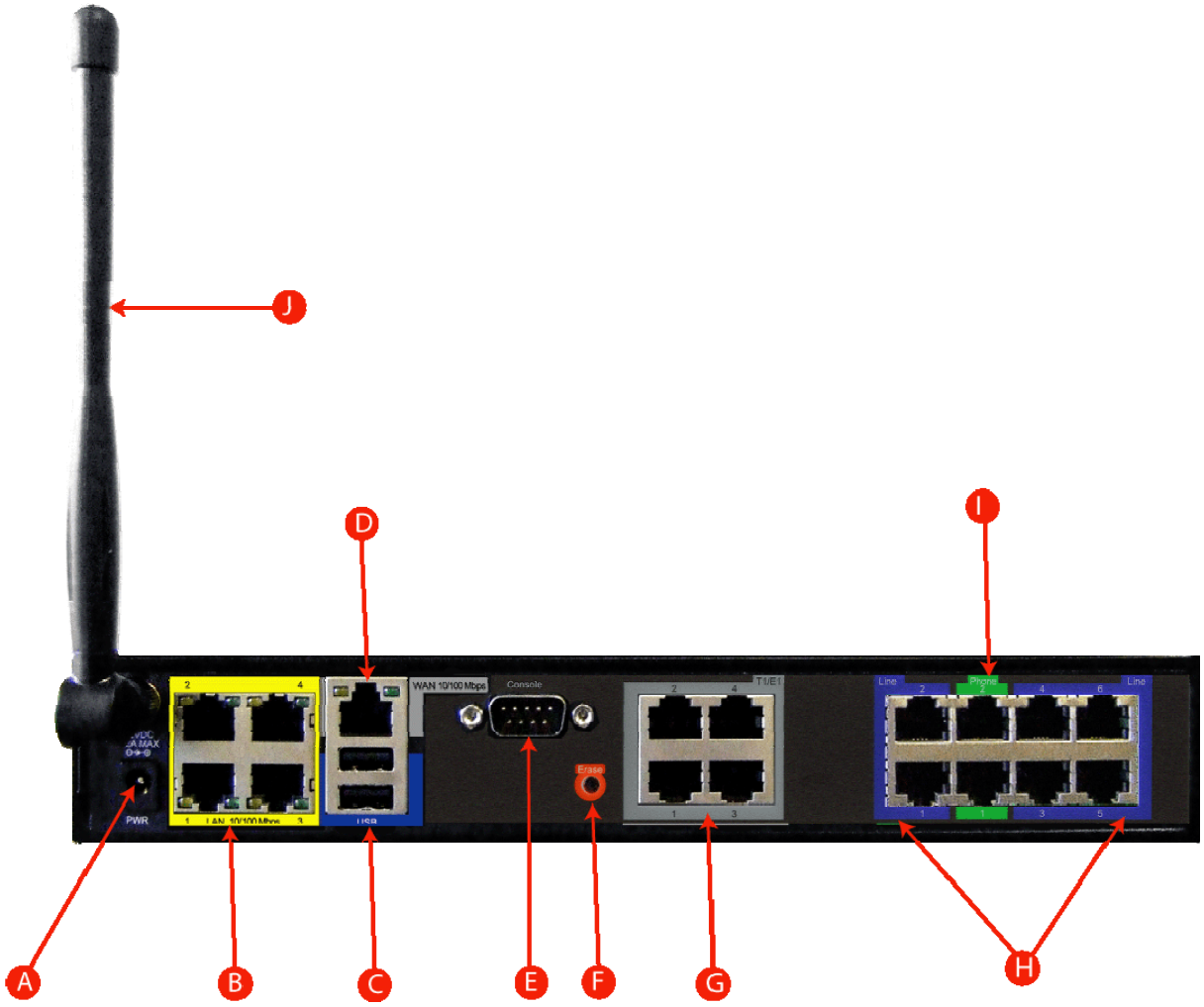
This guide also provides an example of a typical 4562 deployment that can be used as a guideline for your installation.

Requirements for Installation

- A computer with a web browser such as Microsoft Internet Explorer or Netscape Navigator or any other browser of your choice
- At least one Ethernet cable
- Following information supplied by the VoIP Service Provider
  - IP address of the WAN interface
  - if T1 is being used for WAN connection then:
    - T1 frame format
    - Layer 2 protocol such as PPP, Frame Relay/DLCIs, HDLC, etc.
  - IP address of the Softswitch

Instructions

Step 1 – Connecting the Cables

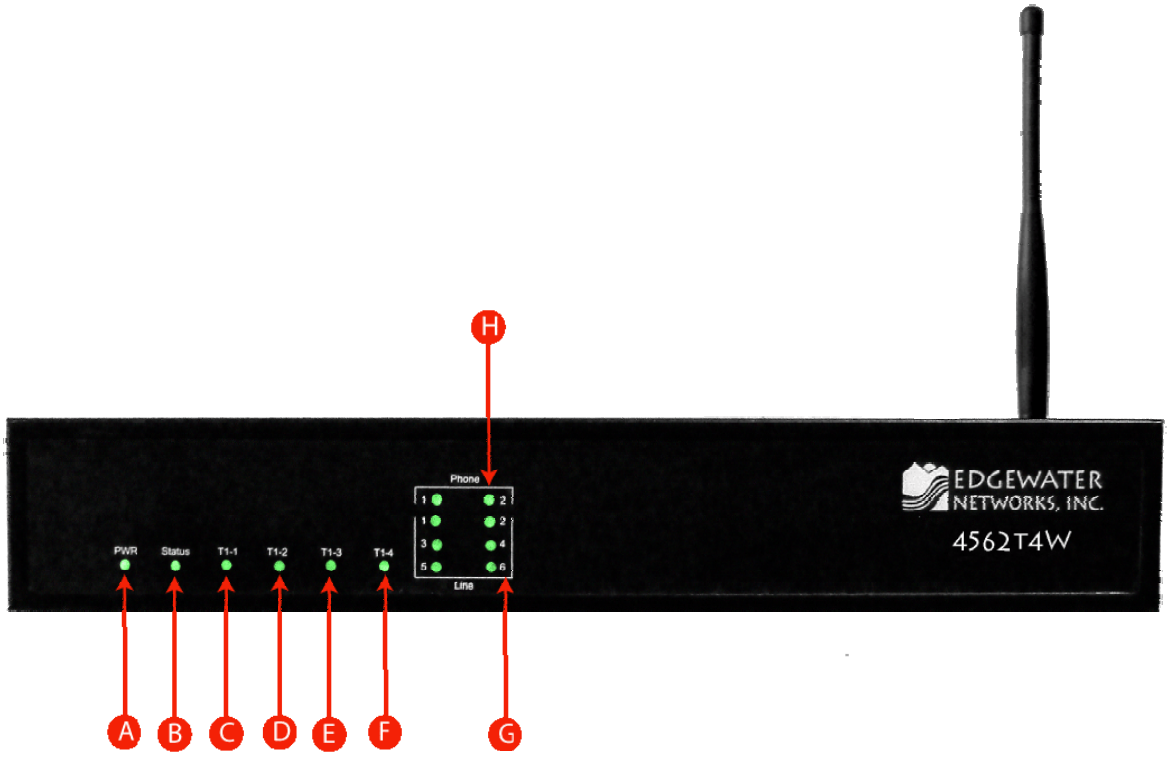


1. Connect one end of an Ethernet cable to local LAN port 4 of 4562. This port can be seen in the area “B” of the above diagram. Connect the other end of the cable to your computer’s Ethernet port.
2. If T1 is used for the WAN connectivity then perform the following steps, otherwise go to step 5.

3. Based on the number of functional ports, connect on end of the T1 cable(s) to the T1 port(s) and the other end of the cable(s) to the T1 demarcation unit provided by the Service Provider.

   To reduce the risk of fire, connect the T1 port to the T1 network using only 26 AWG or larger wire such as 24, 22, 20, etc.

4. Skip to step 8.
5. Connect an Ethernet cable between the Ethernet WAN port of 4562, shown in the above diagram as “D,” and the Ethernet port on a router or a modem.
6. Connect the PSTN lines to ports denoted by “H” in the above diagram.
7. Connect the regular phones or key system to ports denoted by “I” in the above diagram.
8. Plug one end of the power adapter into an AC outlet and the other end into the power receptacle on 4562. Make sure that the power and status LEDs, shown in the diagram below as “A” and “B”, are solid green after a short while.

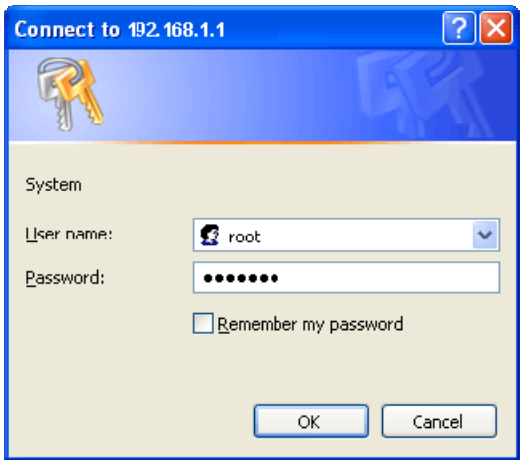


Step 2 − Configuring the EdgeMarc

1. The EdgeMarc device comes preconfigured with 192.168.1.1 local LAN address with a subnet mask of 255.255.255.0. So configure your computers Ethernet adapter's IP address to any address other than 192.168.1.1 in the same subnet mask, for example 192.168.1.10.

   If using a LAN switch then the switch must support 100Mbps full duplex.

2. Launch a web browser on the PC and enter the following URL: http://192.168.1.1 and hit enter
3. The following login window should appear:



4. Enter "root" in the "User name" field and "default" in the "Password" field.
5. The "System" page should appear next.
6. From the "Configuration Menu" on the left configure the following:
   - "Network" – To configure WAN and LAN ports
   - Optionally configure "DHCP Server" to suit your needs.

Step 3 − Plan Your Configuration

The EdgeMarc 4562 can be deployed as a gateway router in a network. It can also be deployed in a network behind an existing firewall. Based on your deployment criteria, consult the following documents for further configuration:

- EdgeMarc 4500 Series Converged Networking Router Installation Guide
- VoIP Operating System (VOS) for EdgeMarc User Manual

Helpful Hints

Although not recommended, the 4562 and IP phones can be installed behind an existing enterprise firewall. In this instance the firewall will have to be configured to allow access to and from the 4562's public IP address for the following ports:

Port Type	Firewall Ports to Open
UDP	161 (SNMP) and 162 (SNMPTRAP)
RTP	1056 to 1255
TCP	SSH TCP 22 for remote management & TCP 80 for WAN configuration-downloads
Telnet	23
FTP	TCP 21 for stateful TCP-session control from 4500 to Edgewater FTP server
MGCP	2427, 2429, 2432, and 2727
NTP	123
SIP	5060 and 5075

IP phones normally point to a local NTP server for their time reference. The NTP port 123 needs to be opened if your network does not have an NTP server.

Please Note: Traffic shaping for this configuration is only available if the enterprise data devices are also installed behind the 4500.

The web page configurations for the various 4562 deployments are shown below. The two darker-shaded rows indicate the *minimum* configuration required for each deployment.

4562 GUI Configuration Page	4562 as Gateway Router	4562 within existing infrastructure	4562 behind an existing firewall
Network	Yes	Yes	Yes
VoIP/ALG	Yes	Yes	Yes
NAT	Yes	Optional	Yes
Firewall	Yes	Optional, but recommended	Optional, but recommended
DHCP	Yes	Yes (but should be disabled if DHCP server already exists)	Yes (but should be disabled if DHCP server already exists)
Traffic Shaper	Yes	Yes	Optional (depends on network topology)
Traffic Simulator	Only for testing	Only for testing	Only for testing
System	As needed	As needed	As needed

Please visit our website at www.edgewaternetworks.com or contact the Edgewater Technical Assistance Center at 408.351.7255 for additional information or assistance.

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