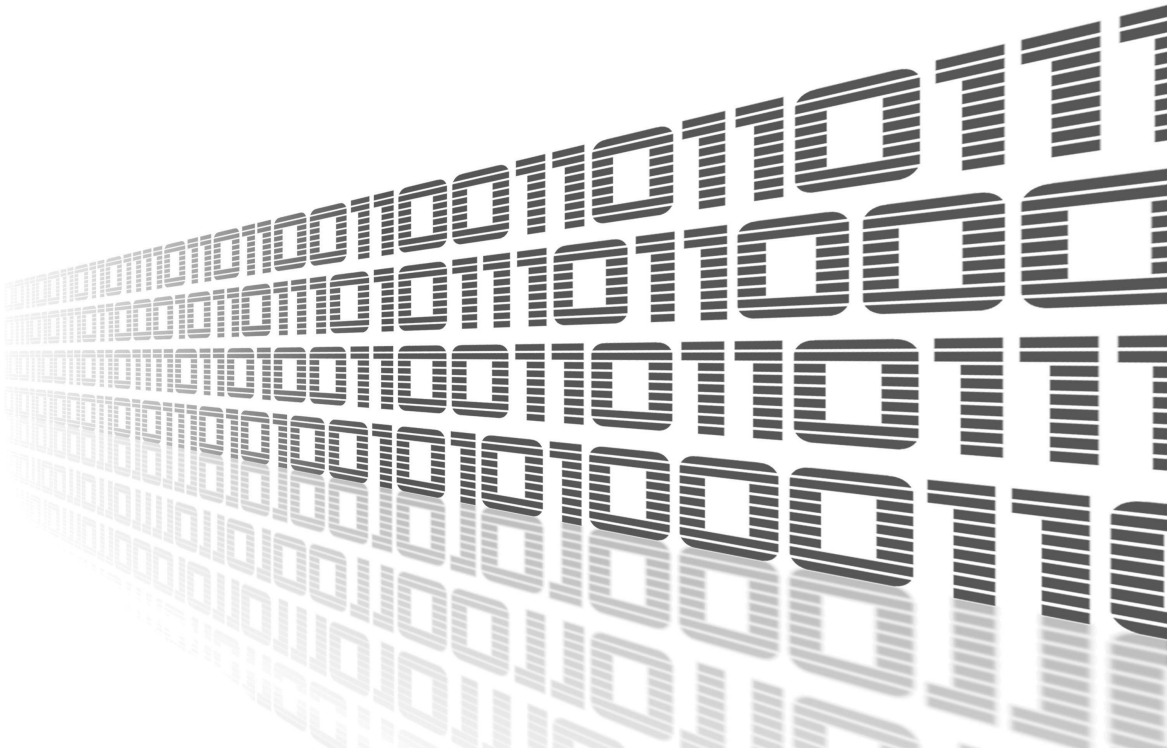
RouterApp

User Module

Transparent Mode

APPLICATION NOTE



ADVANTECH

www.lucom.de

19-01-21

Used symbols

Danger – Information regarding user safety or potential damage to the router.

Attention – Problems that may arise in specific situations.

Information or notice – Useful tips or information of special interest.

Example – example of function, command or script.

Advantech Czech s.r.o., Sokolska 71, 562 04 Usti nad Orlici, Czech Republic
Document No. APP-0069-EN, revised on June 17, 2020. Released in the Czech Republic.

Contents

List of Figures

19-01-21

1. Description of user module

This user module is not installed on *Advantech* routers by default. See *Configuration Manual* for the description how to upload a user module to the router. For more information see the *Configuration manual*, chapter *Customization –> User Modules*.

This user module works for the ETH0 interface only.

After loading the user module into any Advantech router, this router becomes "invisible" for the remote devices. It is available only for a device that is located behind the router. The default IP address of the ETH0 interface is 192.168.1.1. All communication with the device, that is located behind this router, runs directly. This means that communication from the Internet toward the SIM IP will be redirected to the interface of the device behind this router.

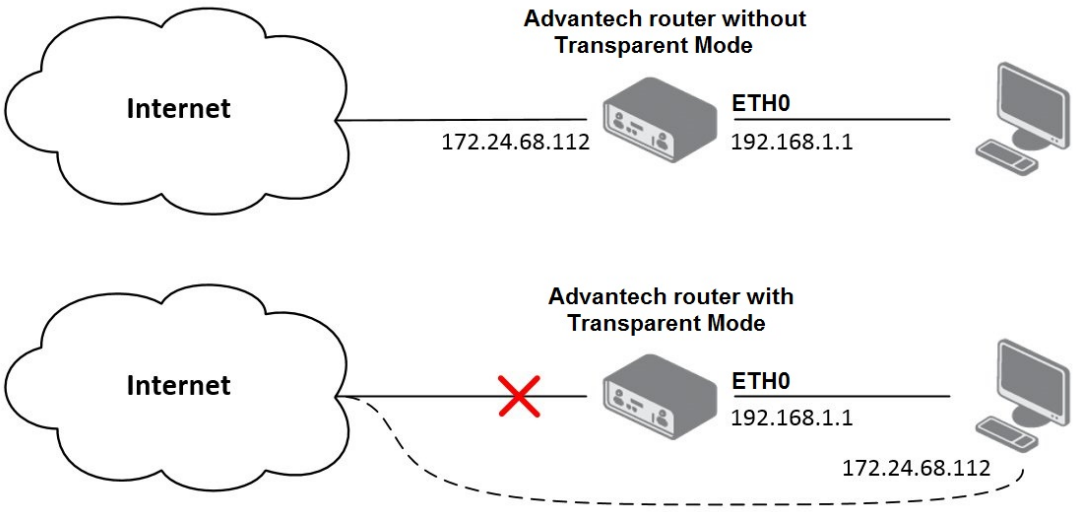


Figure 1: Functional scheme

The user module has no web interface and it is not necessary to activate it (it's active immediately after uploading).

19-01-21

2. Configuration

2.1 Automatic configuration during the module installation

During the installation of *Transparent Mode* module to the router, DHCP server (dynamic distributing of IP addresses) is disabled. IP address is allocated only when PPP connection is established. For cases when PPP connection is not established, it is necessary to set a static IP address for a device behind the router. The moment the user module is uninstalled, the router is reconfigured to its original state. If the DHCP server was enabled before installing *Transparent Mode* module, after uninstalling this module will be enabled again.

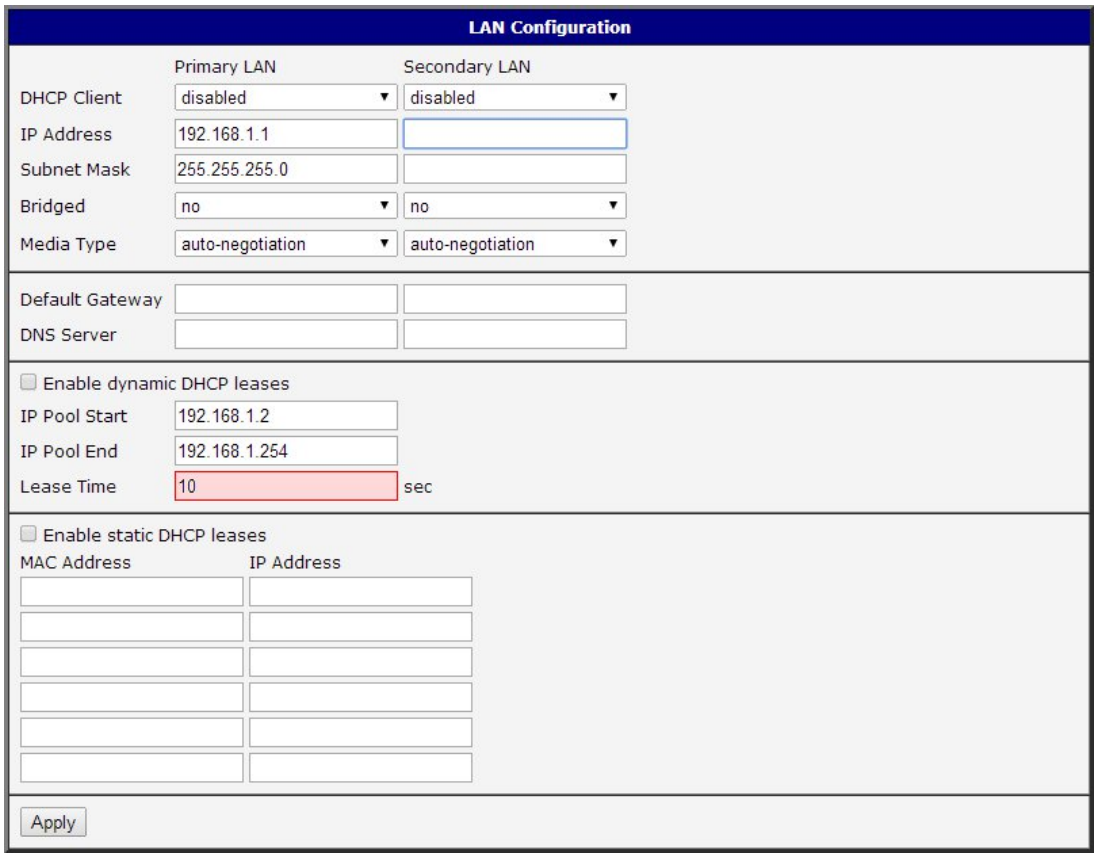


Figure 2: Reconfiguration of *Lease Time*

During the installation of this module, *Masquerade outgoing packets* item (on *NAT* page of router web interface) is disabled. **This item must never be enabled!**

2.2 Automatic forwarding from the router

For automatic forwarding from the router to the device behind this router is necessary to enable the protocol through which access to this device will be allowed. This is done using the form on the *NAT* page (see the figure below). By default, access through each of protocols is disabled.

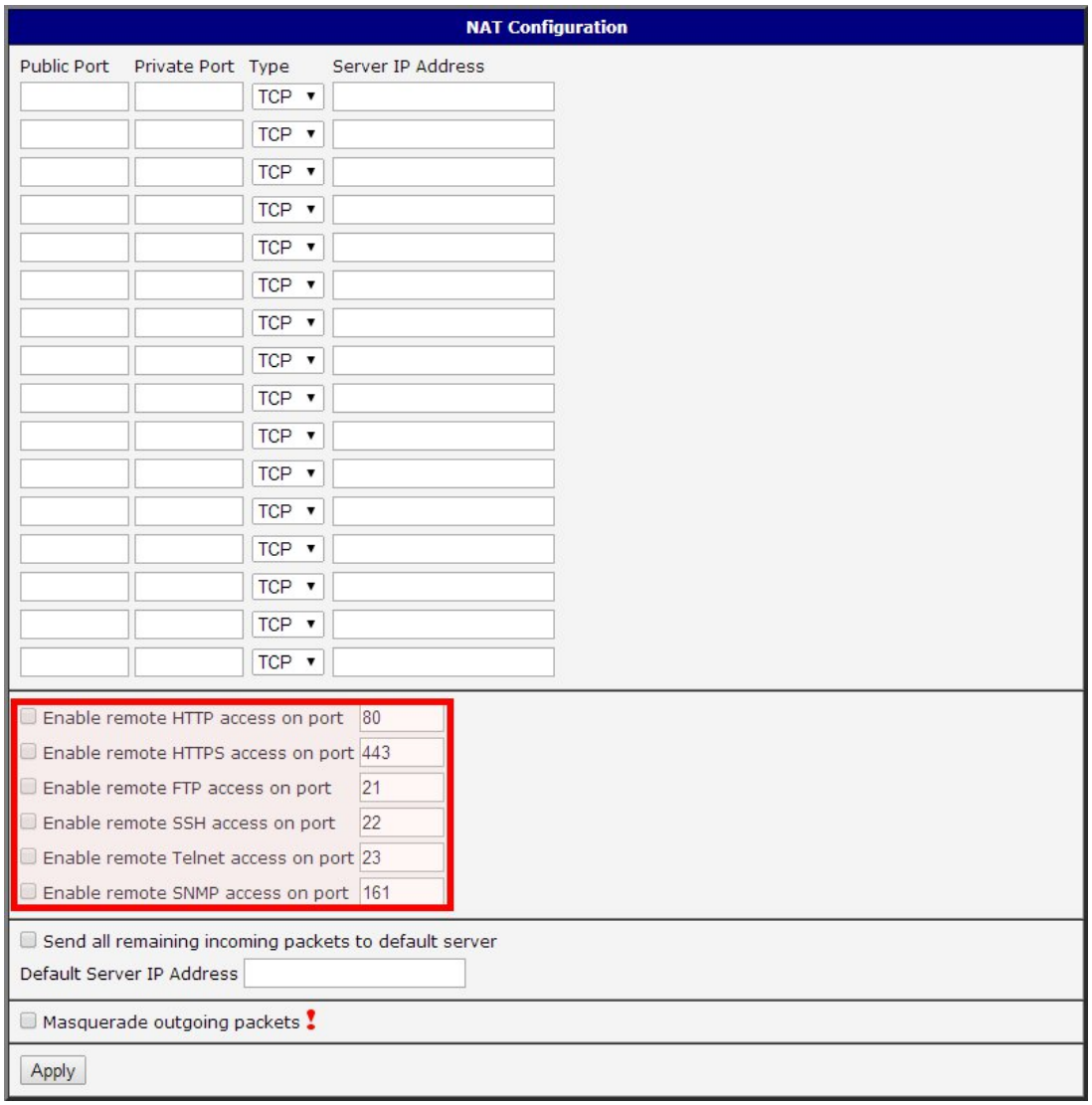


Figure 3: Configuration of forwarding

19-01-21

2.3 Access to the router

As already mentioned in the first chapter, router with *Transparent Mode* module is normally available only for a device which is located behind the router. Use the default IP address of the router – 192.168.1.1 (configuration can be performed only by logged in user – name and password is *root* by default).

However, it is also possible to set access to the router from the outside using selected protocol. In that case, communication within this protocol is not forwarded to the device behind the router. Configuration is done using the form on *NAT* page of the router web interface. It is necessary to set values for *Public Port* and *Private Port*, select protocol and enter 192.168.1.1 to the *Server IP address* field (see the figure below).

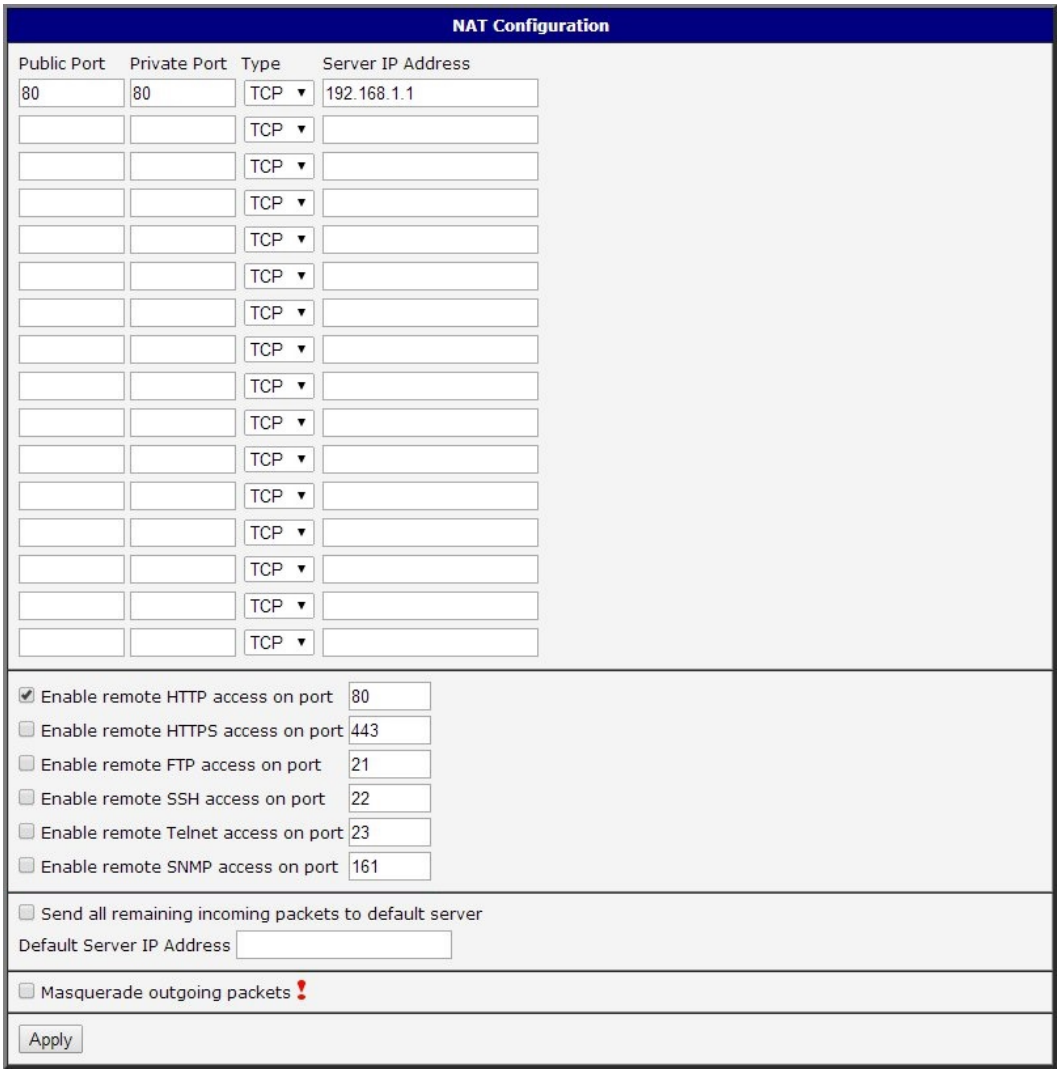


Figure 4: Access to the router from the outside

3. Related Documents

[1] Advantech Czech: **v2 Routers Configuration Manual** (MAN-0021-EN)
[2] Advantech Czech: **SmartFlex Configuration Manual** (MAN-0023-EN)
[3] Advantech Czech: **SmartMotion Configuration Manual** (MAN-0024-EN)
[4] Advantech Czech: **SmartStart Configuration Manual** (MAN-0022-EN)
[5] Advantech Czech: **ICR-3200 Configuration Manual** (MAN-0042-EN)

Product related documents can be obtained on *Engineering Portal* at www.ep.advantech-bb.cz address.

19-01-21