



go anywhere communication and data transfer



# Ultra eSAM

## Port Forwarding USER GUIDE

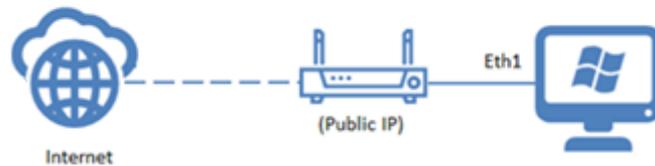


## INTRODUCTION

Port Forwarding is a technique for sharing a single WAN IP Address between multiple clients, such that multiple devices can be accessed behind a gateway.

When a modem, like the eSAM, is connected to the internet it is assigned a single IP Address through which it can access the internet. When multiple devices are connected to the eSAM on a local network, they all use this same IP Address to send and receive internet traffic. The modem is responsible for tracking incoming and outgoing packets to determine which LAN Client requested which incoming packet.

In the case of a LAN-connected server, we need to explicitly tell the modem which packets are intended for the server and which are not. We achieve this through port forwarding.



## CONFIGURATION

1. First, we must identify which device and which port we wish to forward. A list of clients is viewable from the eSAM web GUI, on the 'Status>LAN' Window

LAN Status	Enable
IP	192.168.8.1
Subnet Mask	255.255.255.0
MAC	00:50:C2:49:50:43

Client List

client name	IP Address	MAC Address
JamesWitney	192.168.8.66	b8:08:cf:bc:b9:4d

Refresh

2. Next, we need to decide which port(s) we wish to forward. This will depend upon your application, as different protocols require different ports to function.
3. Open the Forward>NAT window to view a list of active forwarded ports.
4. For this application we want to use DNAT to forward all packets that arrive at the modem regardless of their source. Press 'Add' to add a new forwarding rule.

MASQ

Interface	Operation
modem	Delete

SNAT

Protocol	Original Address	Original Port	Mapping Address	Mapping Port	Operation
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DNAT

Protocol	Original Address	Original Port	Mapping Address	Mapping Port	Operation
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Add Refresh

- Set the Interface to 'modem', and then enter the parameters for your application

**Basic Settings**

NAT Type	<input checked="" type="radio"/> DNAT <input type="radio"/> SNAT <input type="radio"/> MASQ
Protocol	all ▼
Original Address Type	interface ▼
Interface	modem ▼
Original Port	<input type="text"/> 1-65535 or [1-65535]
Mapping Address	<input type="text"/> * eg. 192.168.0.1
Mapping Port	<input type="text"/> 1-65535 or [1-65535]

Parameter	Description
Protocol	The protocol of traffic we wish to forward according to this forwarding rule.
Original Port	The WAN-facing port, or range of ports, we wish to forward to a device within our network
Mapping Address	The IP Address of the device within our network we want to forward this traffic to.
Mapping Port	The LAN-facing port, or range of ports, we want to use when sending traffic to a device within the network.

- Once complete, press 'Save' to save the rule

