

LAB 3 – NAT & Port Forwarding

The screenshot shows the pfSense Firewall / NAT / Port Forward configuration interface. A prominent red banner at the top displays a warning about an insecure password.

Port Forward tab is selected. The table lists a single rule:

| Interface | Protocol | Source Address | Source Ports | Dest. Address | Dest. Ports | NATIP | NAT Ports | Description | Actions |
|-----------|----------|----------------|--------------|-----------------|-------------|--------------|-----------|--------------------|---------|
| WANLINK | TOP | * | * | WANLINK address | 80 (HTTP) | 192.168.1.50 | 80 (HTTP) | Web Server Forward | |

Outbound tab is selected. The Outbound NAT Mode section shows Hybrid Outbound NAT mode selected. The Mappings table lists a manual outbound rule:

| Interface | Source | Source Port | Destination | Destination Port | NAT Address | NAT Port | Static Port | Description | Actions |
|-----------|-----------------|-------------|-------------|------------------|-----------------|----------|-------------|--------------------------------|---------|
| WANLINK | 192.168.20.0/24 | * | * | * | WANLINK address | * | | Manual Outbound for Lab Subnet | |

Automatic Rules table shows two auto-created ISAKMP rules:

| Interface | Source | Source Port | Destination | Destination Port | NAT Address | NAT Port | Static Port | Description |
|-----------|--|-------------|-------------|------------------|-----------------|----------|-------------|------------------------------|
| WANLINK | 127.0.0.0/8 ::1/128 192.168.10.0/24 | * | * | 500 | WANLINK address | * | | Auto created rule for ISAKMP |
| WANLINK | 127.0.0.0/8 ::1/128 192.168.10.0/24 | * | * | * | WANLINK address | * | | Auto created rule |

Redirect target IP

| | | |
|---|------------------|--------------|
| Type | Address or Alias | 192.168.1.50 |
| Enter the internal IP address of the server on which to map the ports. e.g.: 192.168.1.12 for IPv4 In case of IPv6 addresses, it must be from the same 'scope', i.e. it is not possible to redirect from link-local addresses scope (fe80:*) to local scope (::1) | | |

Redirect target port

| | | |
|---|------|--------|
| HTTP | Port | Custom |
| Specify the port on the machine with the IP address entered above. In case of a port range, specify the beginning port of the range (the end port will be calculated automatically). This is usually identical to the "From port" above. | | |

Description

| |
|--|
| Web Server Forward |
| A description may be entered here for administrative reference (not parsed). |

No XMLRPC Sync

| |
|--|
| <input type="checkbox"/> Do not automatically sync to other CARP members |
| This prevents the rule on Master from automatically syncing to other CARP members. This does NOT prevent the rule from being overwritten on Slave. |

NAT reflection

| |
|---------|
| Disable |
|---------|

Filter rule association

| |
|--------------------------------------|
| Rule NAT Web Server Forward |
| View the filter rule |

Rule Information

| | |
|----------------|--|
| Created | 12/13/25 04:56:22 by admin@192.168.10.103 (Local Database) |
| Updated | 12/13/25 04:57:11 by admin@192.168.10.103 (Local Database) |

[Save](#)

[States](#) [Reset States](#)

State Filter

| | |
|--|---|
| Interface | <input type="text" value="all"/> |
| Filter expression | <input type="text" value="192.168.10.1"/> |
| Rule ID | <input type="text" value="Comma separated list of integer rule IDs"/> |
| Filter | |
| Kill filtered states | Kill States |
| Remove all states to and from the filtered address | |

States

| Interface | Protocol | Source (Original Source) -> Destination (Original Destination) | State | Packets | Bytes | |
|-----------|----------|--|-------------------------|-----------|------------------|--|
| LANCORE | tcp | 192.168.10.103:63010 -> 192.168.10.1:80 | ESTABLISHED:ESTABLISHED | 117 / 196 | 27 Kib / 225 Kib | |
| LANCORE | tcp | 192.168.10.103:58490 -> 192.168.10.1:80 | FIN_WAIT_2:FIN_WAIT_2 | 4 / 3 | 172 B / 132 B | |
| LANCORE | tcp | 192.168.10.103:52970 -> 192.168.10.1:80 | ESTABLISHED:ESTABLISHED | 35 / 54 | 9 Kib / 54 Kib | |
| LANCORE | tcp | 192.168.10.103:54215 -> 192.168.10.1:80 | ESTABLISHED:ESTABLISHED | 5 / 4 | 931 B / 1 Kib | |
| LANCORE | tcp | 192.168.10.103:51114 -> 192.168.10.1:80 | ESTABLISHED:ESTABLISHED | 5 / 4 | 942 B / 2 Kib | |

