

How To Guide

XRoads Networks

Edge Network Appliance How To Guide:

EdgeXOS Static Routing

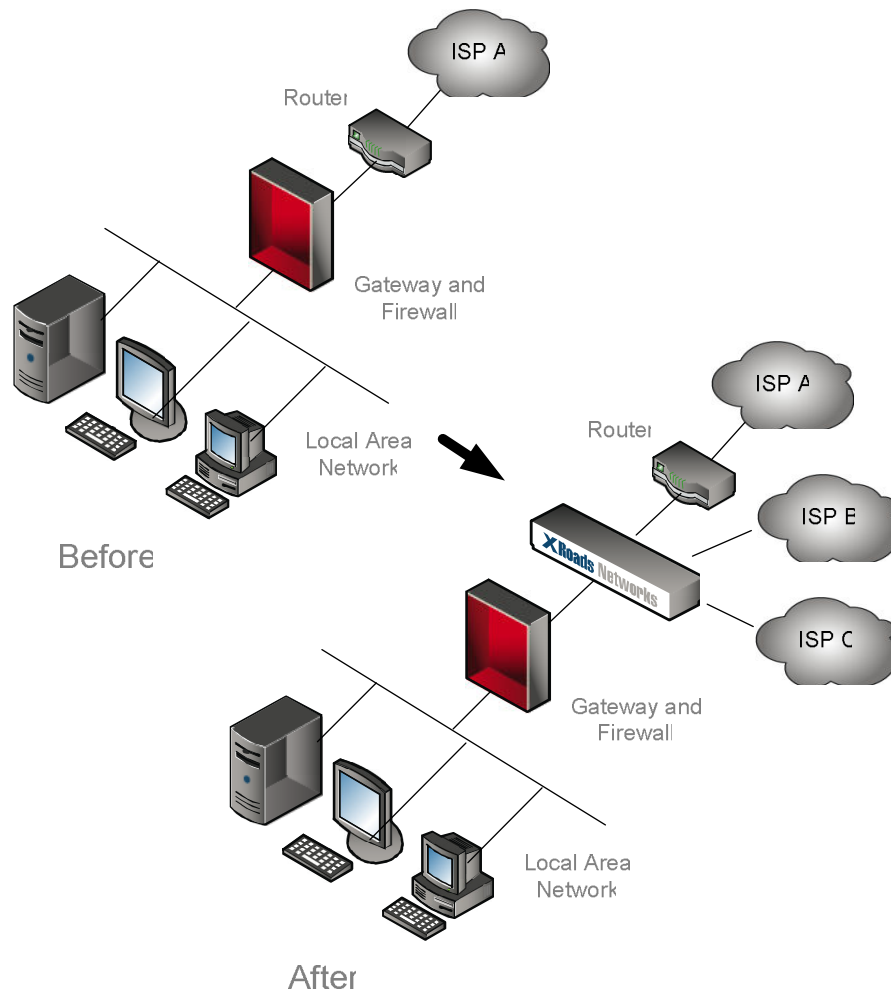
Static Routing Overview

This document provides an overview of how to setup a static routing configuration through the WAN1 interface and how additional static routes may also be added to the EdgeXOS appliance for internally routed networks.

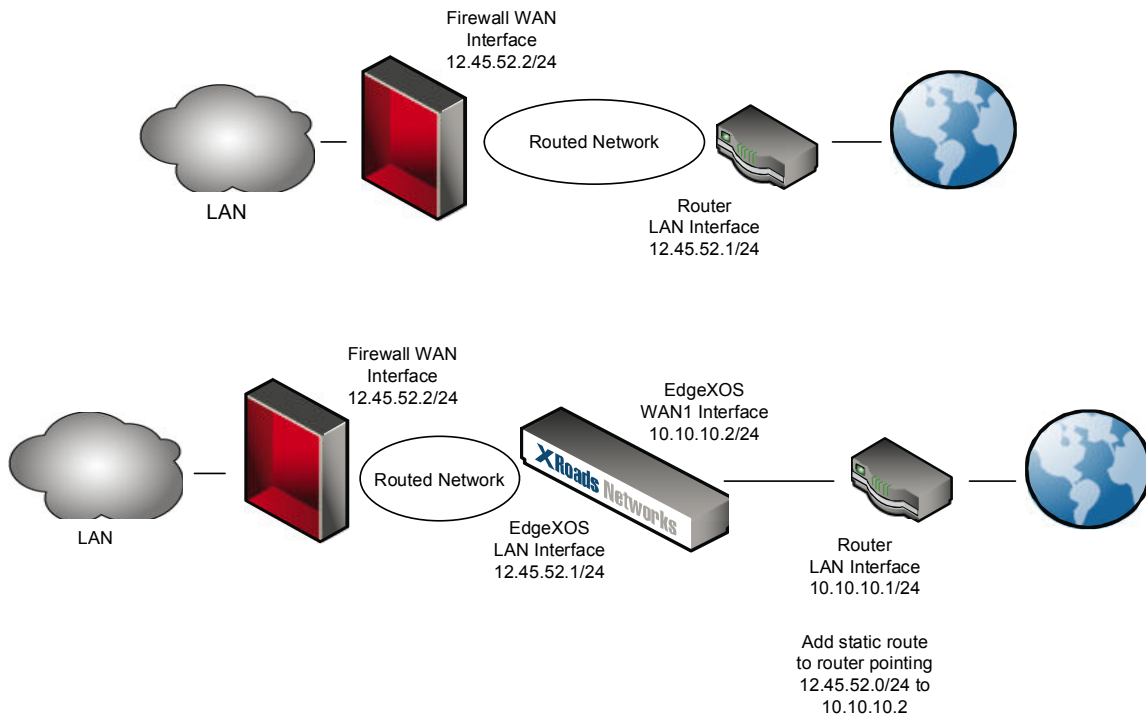
Local vs. Static Routes: Local routes are those directly connected, i.e. the routes that are established when the Interfaces are configured. Directly connected routes are created using the IP address information entered when the interface is configured. Static routes are additional routes which can be added, however the next hop for these routes MUST be a locally available destination, i.e. an IP address available via a directly connected route.

Static Routing Deployment: In some instances customer choose to deploy the EdgeXOS appliance in static routing mode. This is one of the cleanest methods to deploy the appliance and thus is a preferred method for network administrators.

In order to deploy in static routing mode, the network administrator MUST have control and access to the gateway router as several changes must be performed to the gateway router in order to make this type of deployment work.



Gateway Router Changes: In order to setup static routing and keep in tactic the existing routed network space, the gateway router must change its existing LAN interface address and add static routes for the old LAN network pointing to the EdgeXOS appliances WAN address.



In the diagram above you see that we are moving the "Routed Network" (a public network) from being behind to the gateway router, to being behind the EdgeXOS appliance. In this example, the firewall addressing does NOT change, only the gateway router. There are only TWO changes required on the gateway router. 1) The IP address of the LAN interface changes from the 12.45.52.1 address to the 10.10.10.1 address (the network between the gateway router and the EdgeXOS appliance can be either public or private, it does not matter). 2) A static route is added to the gateway router telling traffic where to go if it is bound for the 12.45.52.0/24 network, in this case it is directed to the WAN1 interface of the EdgeXOS appliance at 10.10.10.2.

It is really that simple, the only key factor being that the gateway router must be accessible and that the network administrator know how to change the LAN interface and be able to add a static route.

Add Static Routes (on the EdgeXOS appliance): If you have internal networks that must be routed through an internal router or via a gateway router going to remote sites, you can use the Static Routing module under the Interfaces tab to add these routes. The only requirement for adding static routes is that the Gateway Address must be a local route, i.e. something accessible via a directly connected route.

Add Route: . . . / (Must Be A Network Address)
 . . . (Gateway Address - Note: Do not use when in Proxy Mode)