

Choosing the Right VX-Xpress Network Deployment Option

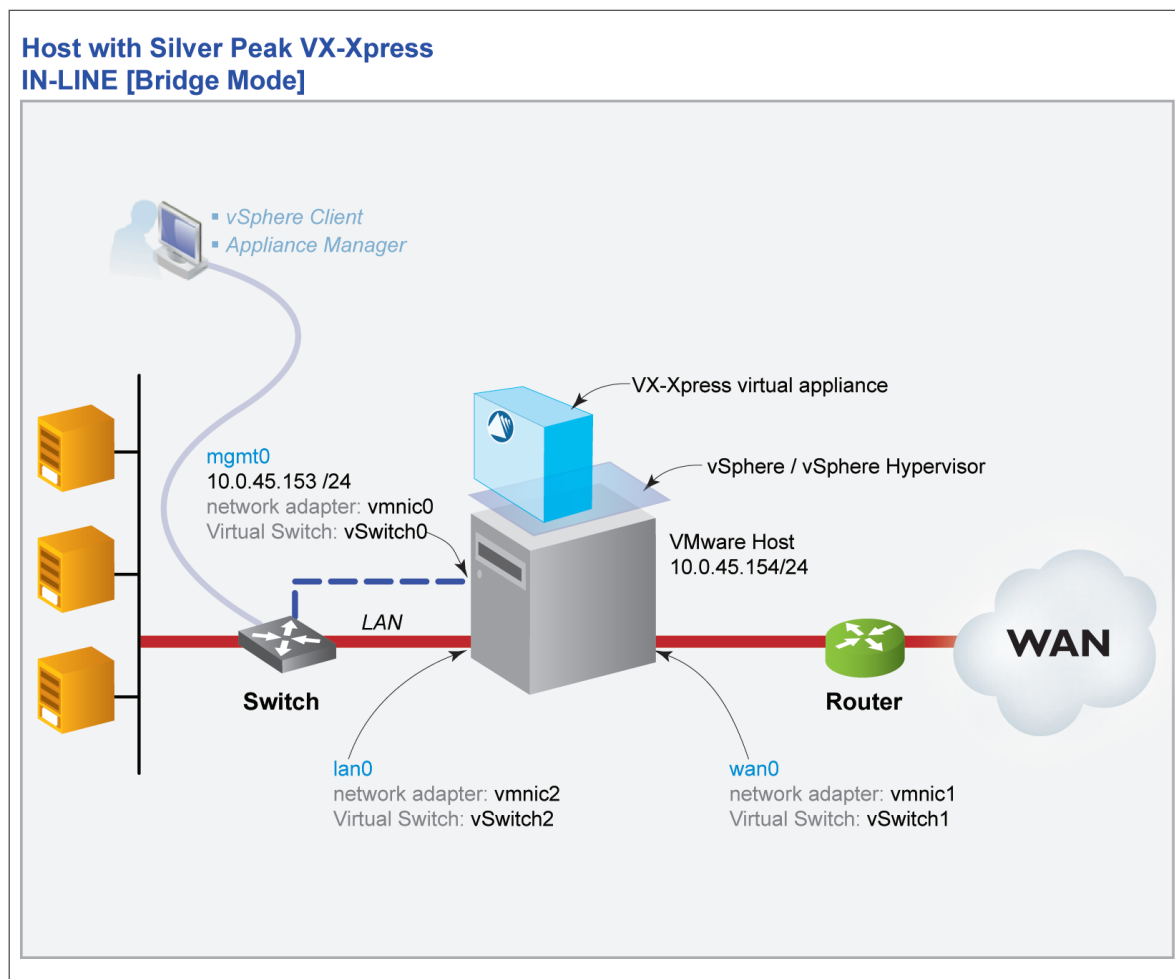
This document should help you decide which network deployment method best suits your environment.

There are two ways to deploy Silver Peak VX-Xpress virtual appliances:

- In-line (bridge mode) deployment
- Out-of-path (router mode) deployment

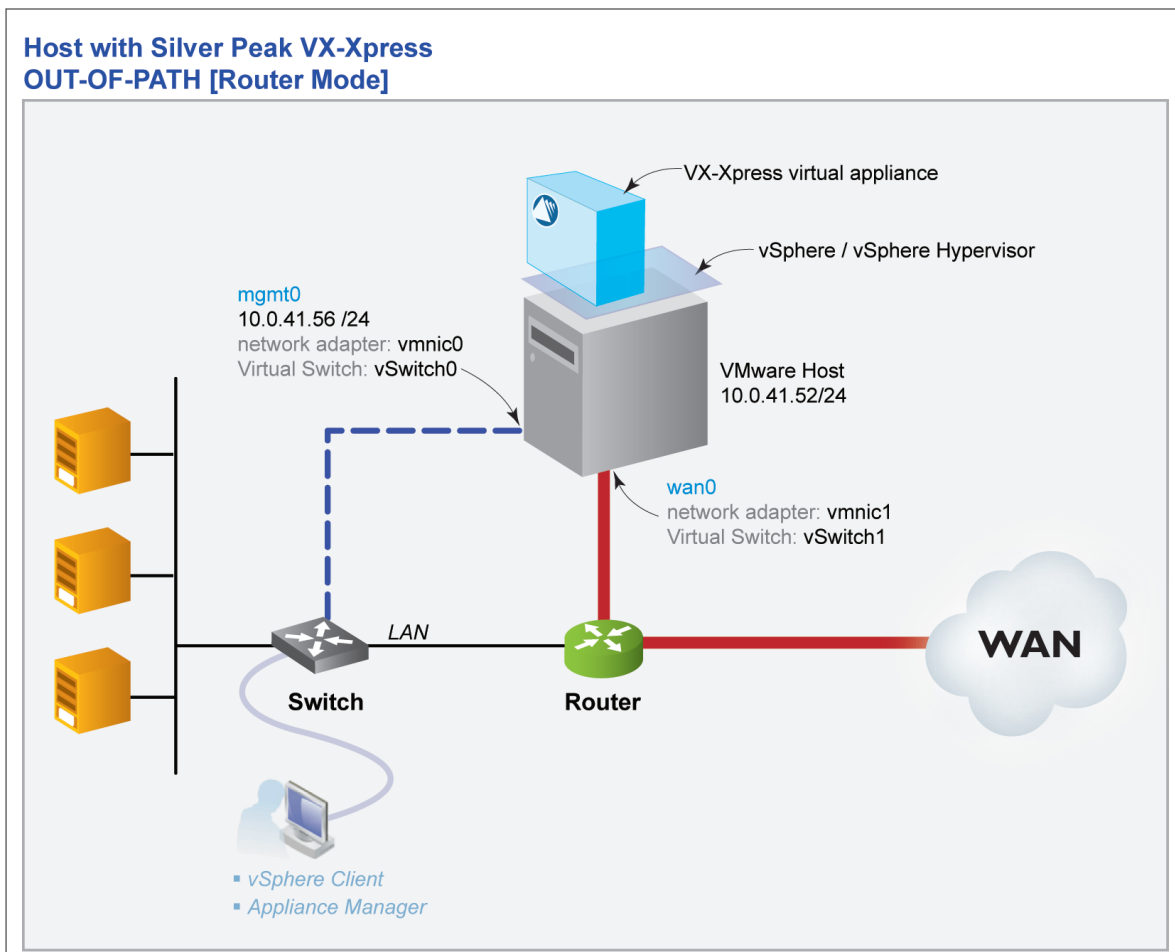
1. In-line deployment (bridge mode) is the simplest deployment option, requires the least amount of configuration.

In-line deployment is the preferred method because of its simplicity.



The Silver Peak appliance is inserted in-line between the WAN router and the Ethernet switch on the LAN side of the network. It is like a "bump" in the wire.

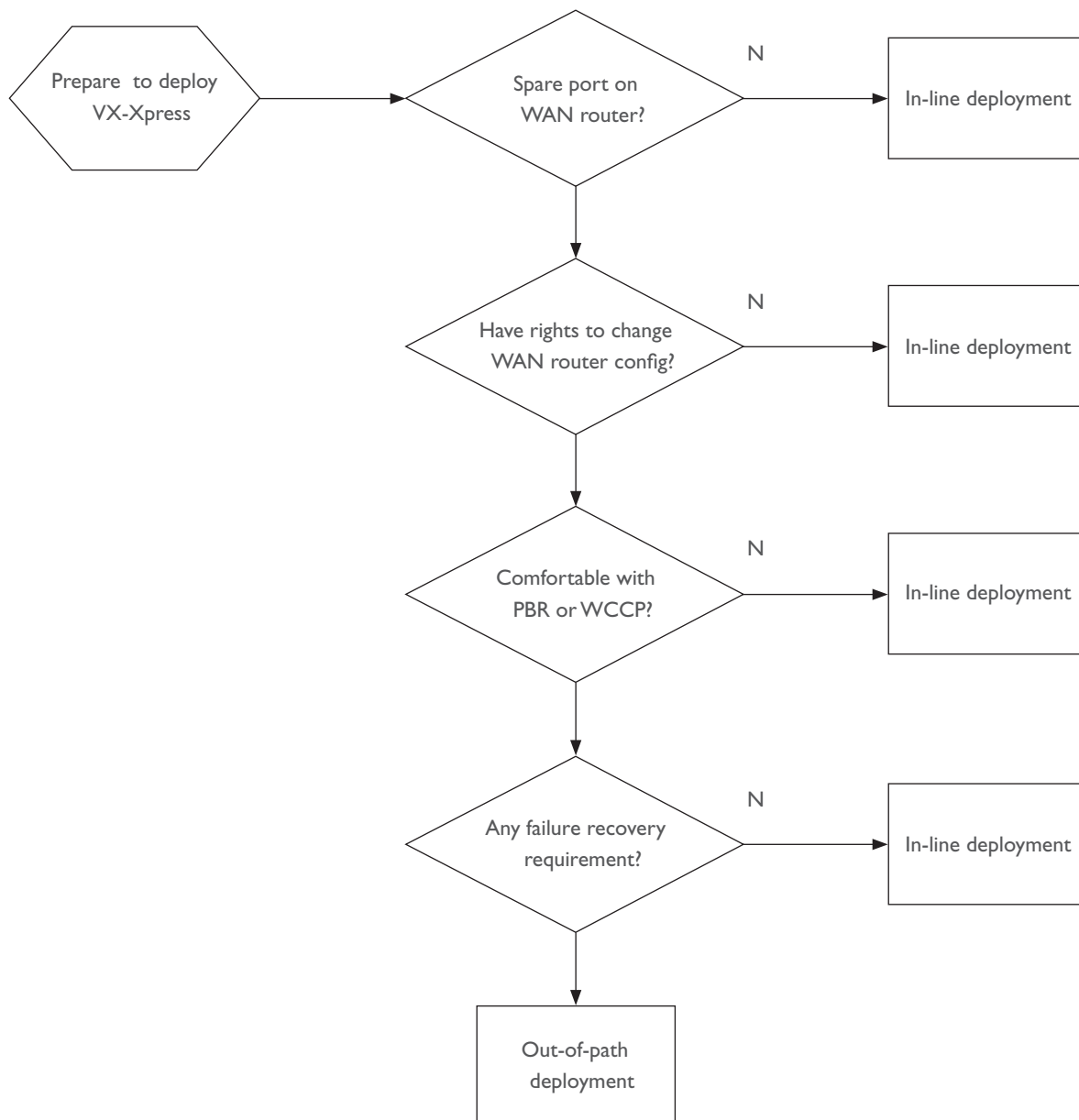
2. Out-of-path deployment (router mode) is more complicated but has the benefit of supporting a more varied set of failure recovery mechanisms.



- The Silver Peak appliance is not in the direct path of network traffic.
- Out-of-path deployment requires re-configuration of the WAN router to redirect traffic to the Silver Peak appliance using Policy-Based-Routing or Web Cache Communications Protocol.

DECIDE ON YOUR DEPLOYMENT METHOD

The following flowchart will help you to make a decision on the deployment method based on your networking setup, familiarity of router configuration and failure recovery requirement.



IN-LINE (BRIDGE MODE) DEPLOYMENT

- The Silver Peak appliance is inserted in-line between the WAN router and the Ethernet switch on the LAN side of the network. It is like a “bump” in the wire.
- No reconfiguration is required on the WAN router.
- In this mode, the Silver Peak appliance intercepts all packets destined for the WAN.
- In case of appliance failure, packets will not be sent to the WAN leading to a service disruption.
- For configuration details, please refer to Chapter 3 of the Silver Peak WAN Optimization Appliances Network Deployment Guide.

OUT-OF-PATH (ROUTER MODE) DEPLOYMENT

- The Silver Peak appliance is not in the direct path of network traffic.
- As a result, it requires reconfiguration of existing WAN router to redirect traffic to the Silver Peak appliance using either:
 - Policy-Based-Routing (PBR) or
 - Web Cache Communications Protocol (WCCP).
- In case of appliance failure:
 - With PBR:
 - If the Silver Peak appliance fails, the physical network adapter on the ESX server stays up. The WAN router will not detect the Silver Peak appliance failure unless you setup an IP SLA statement on the router to monitor the availability of the Silver Peak appliance. When IP SLA is configured correctly on the router, the router will learn that the appliance has become unreachable and will stop routing traffic to the appliance. Packets will continue to be forwarded to the WAN.
 - With WCCP:
 - The router will detect that the Silver Peak appliance in the service group becomes unreachable and stop redirecting traffic to the appliance. Packets will continue to be forwarded to the WAN.
- For configuration details, please refer to Chapter 4 (PBR) or Chapter 5 (WCCP) of the Silver Peak WAN Optimization Appliances Network Deployment Guide.