



# Virtual Service Placement Settings

Avi Technical Reference (v20.1)

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# Virtual Service Placement Settings

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## Overview

Due to the distributed nature of Avi Service Engines, the Avi Controller will directly extend an Avi Service Engine's NICs to the virtual service and pool member IP networks.

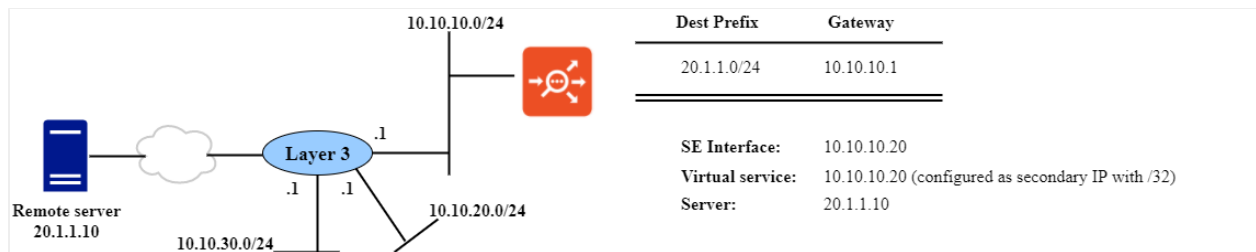
The Avi Controller enables the user to make this network attachment decision manually by providing options on the Virtual Service Placement Settings menu in conjunction with the static routes. The related UI configuration is discussed in detail under the [Configuration](#) section.

## Network Scenarios

Consider a use case with the following networks, as discovered by the Avi Controller. The discovered networks are considered as directly-connected networks by the Avi Controller. \* 10.10.10.0/24 \* 10.10.20.0/24 \* 10.10.30.0/24

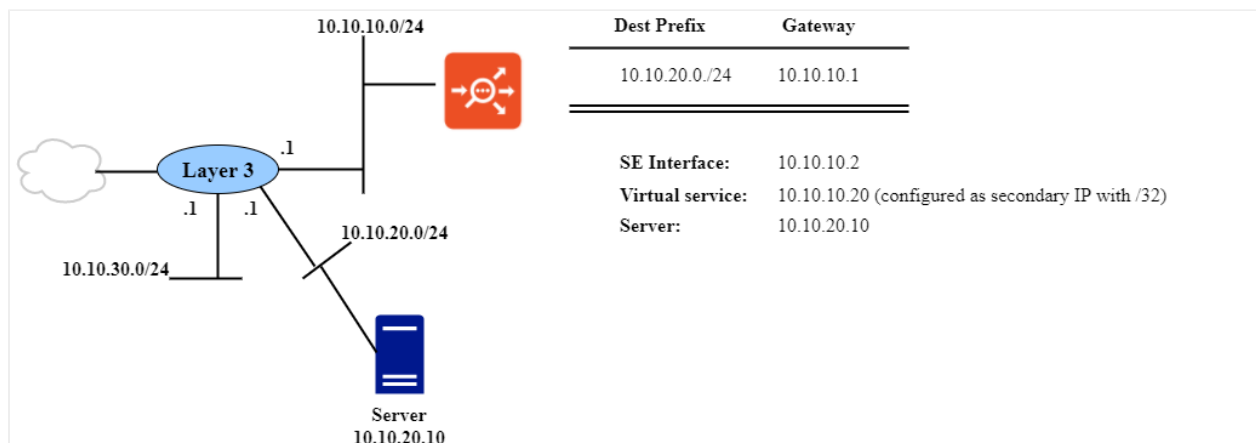
### Servers on an External Network

Virtual service placement will fail without a static route to the remote server.



### Servers on the Discovered Network

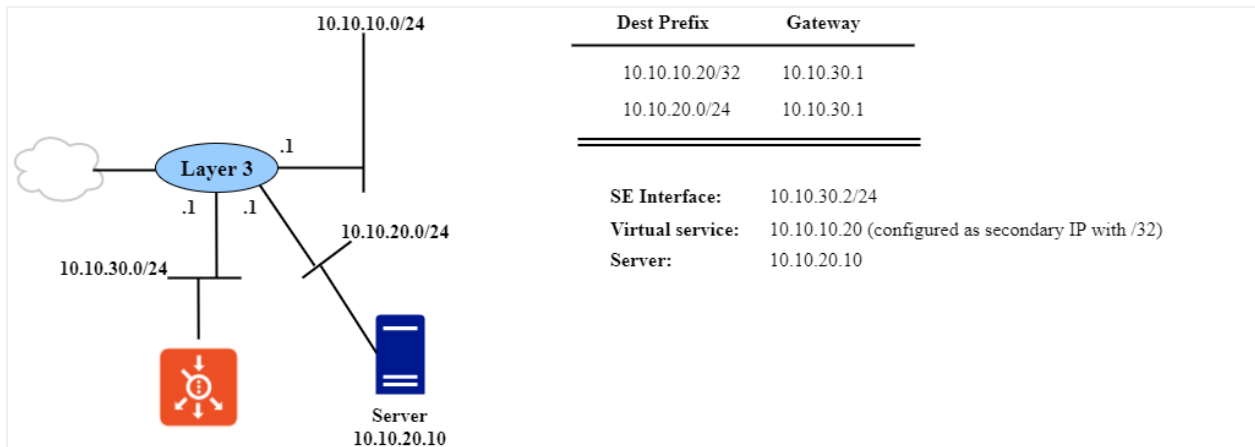
By default, a Service Engine will directly extend its connectivity to the server network by adding a NIC. To force an SE to reach a server by Layer 3, select Prefer Static Routes on Virtual Service Placement Settings and configure a static route for the server IP address.



**Note:** The first option on Virtual Service Placement Settings does not apply to the virtual IP unless the second option is selected.

### Virtual Service IP on the Discovered Network

By default, an SE will extend its connectivity to the virtual service IP network directly by adding a NIC. To force an SE to attach to the selected network for a virtual service IP, select both Prefer Static Routes and Use Routes for Network Resolution of VIP on Virtual Service Placement Settings and configure a static route for the virtual service IP.



In this case, the Layer 3 switch should have a proper static route entry to reach the virtual service.

**Note:** In this example, choosing the second option without choosing the first will have no effect on the virtual service IP network selection.

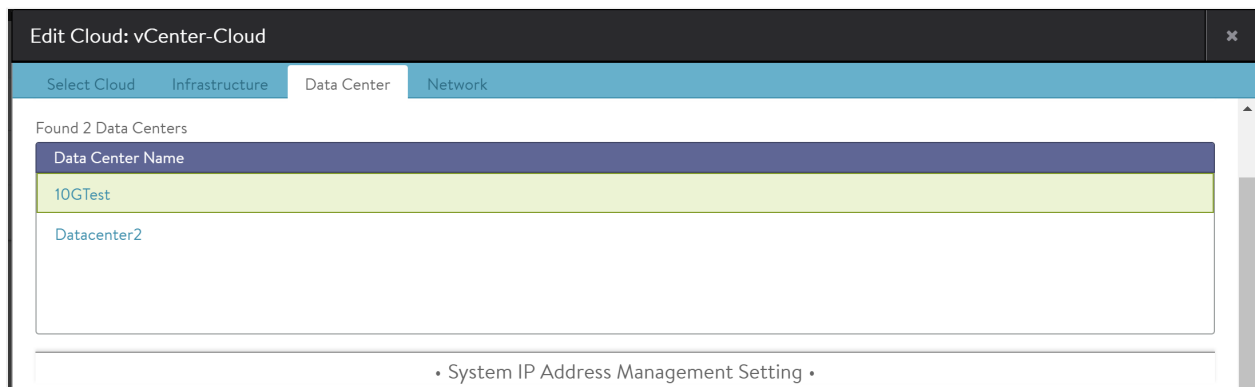
## Configuration

The Virtual Service Placement Settings menu will be displayed during the initial installation menu of the Avi Controller or can be changed after the installation by navigating to Infrastructure > Cloud and clicking on the edit icon. The Static Routes menu is also available in the same location.

You can specify the following placement settings:

You can check Prefer Static Routes vs Directly Connected Network and Use Static Routes for Network Resolution of VIP boxes to define placement settings.

The screenshot for configuration in VMware clouds is shown as follows:



Default Network IP Address Management  
 DHCP     Static

• Virtual Service Placement Settings •

Prefer Static Routes vs Directly Connected Network     Use Static Routes for Network Resolution of VIP

Cancel Save

**Note: Virtual Service Placement Settings are configured on a per-cloud basis.**