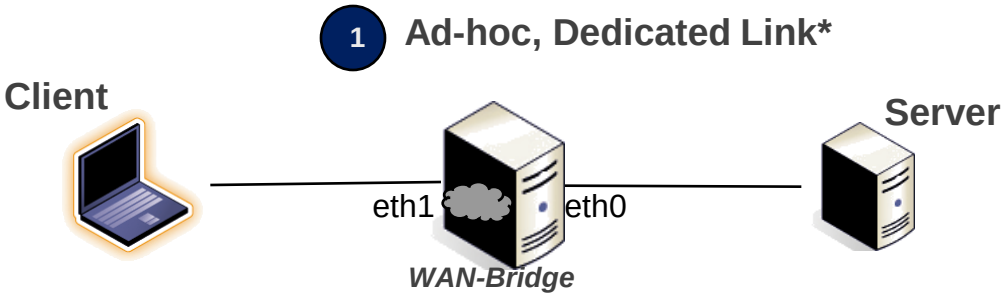
Sample WAN Emulation configurations

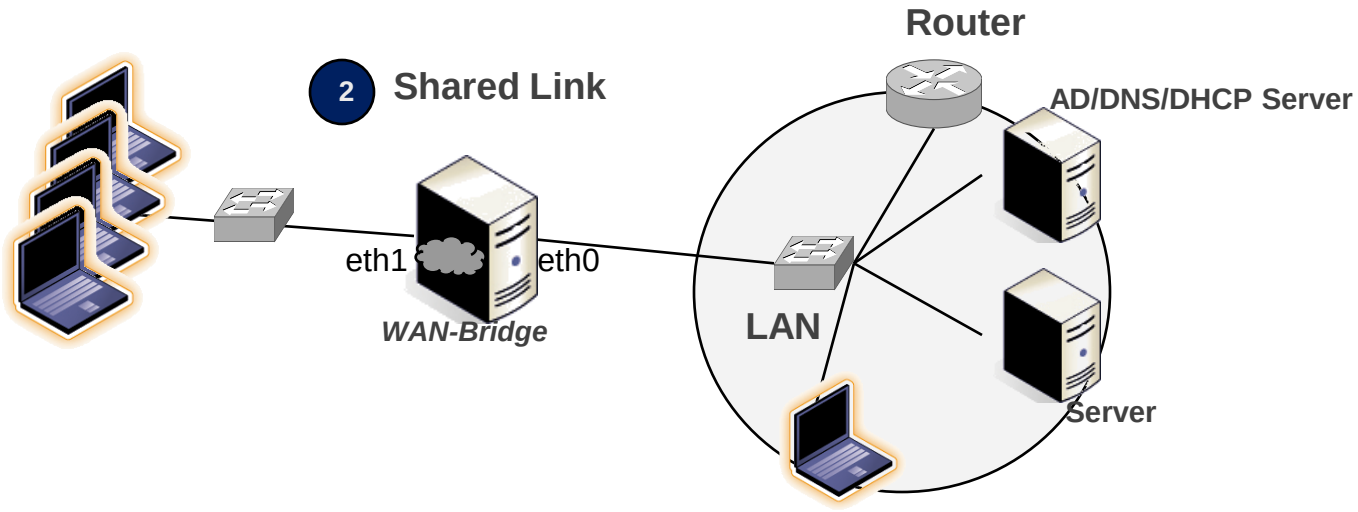
- **The following slides provide sample configurations for WAN Emulation using a variety of physical and virtual environments.**

- **Important note:** In general it is not recommended to run tests using concurrent VMs on a single type-2 hypervisor host, such as VMWare Workstation. One should use a type-1 hypervisor such as VMWare ESX or MSFT Hyper-V for running multiple machines concurrently as they allow you to control resource (CPU, RAM, Network) allocation, reservation and prioritization and allow more realistic network integration capabilities including use of virtual switches, vlans, etc.

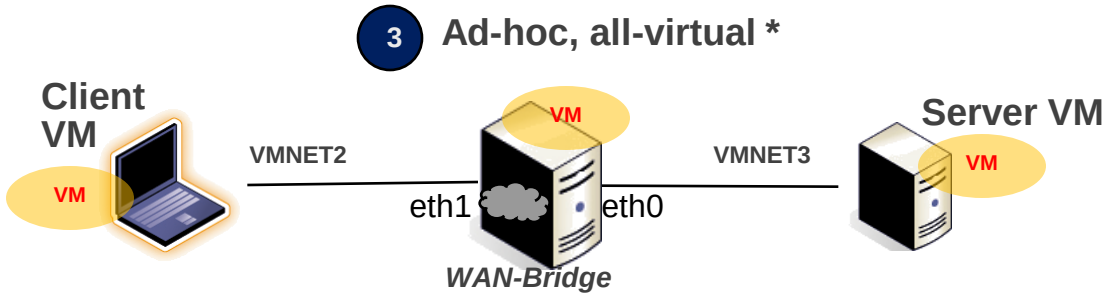
Using Physical Hosts



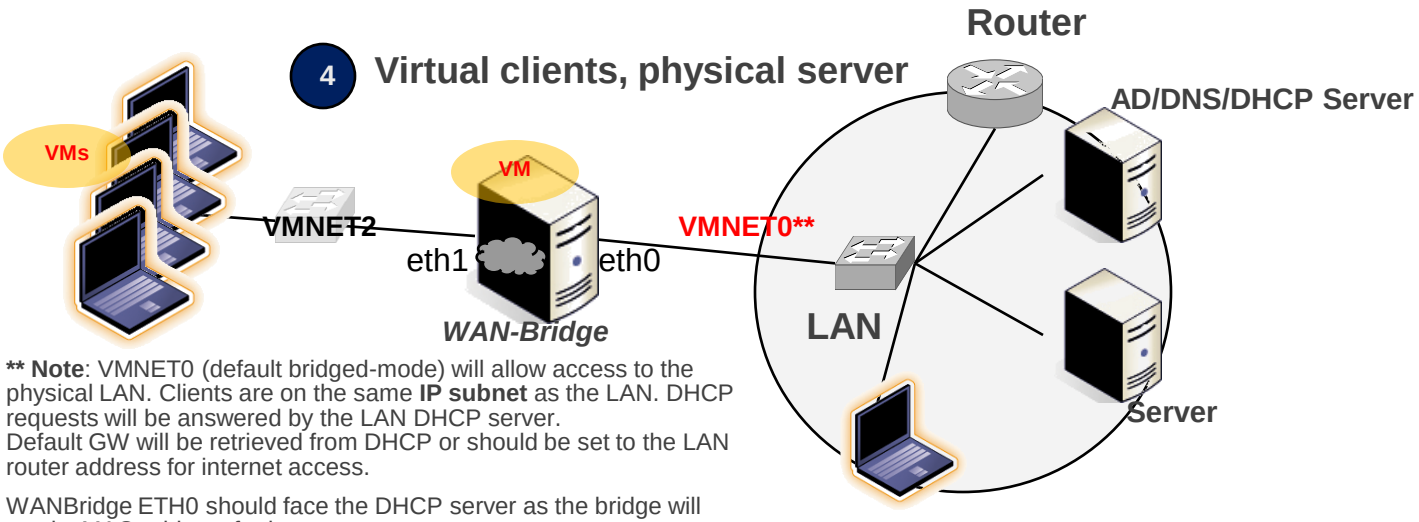
*** Note**: Use a cross-over cable s if NICs are not GigE
Client and Server must be configured with the same I**P Subnet** and a static IP, unless the server is also a DHCP server.Default GW should be set to 127.0.0.1
WANBridge nTop interface can be accessed from Server or Client.



Using VMWare Workstation



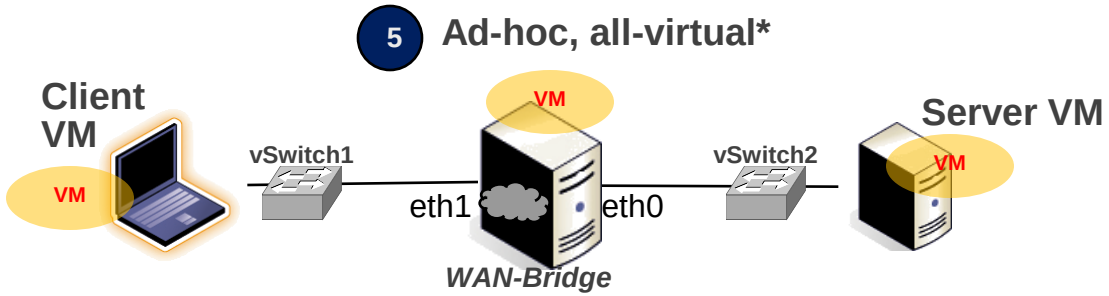
*** Note**: VMNET0,1,8 are special purpose networks and should not be used in this scenario.
Client and Server must be configured with the same I**P Subnet** and a static IP, unless the server is also a DHCP server.Default GW should be set to 127.0.0.1
WANBridge nTop interface can be accessed from Server or Client.



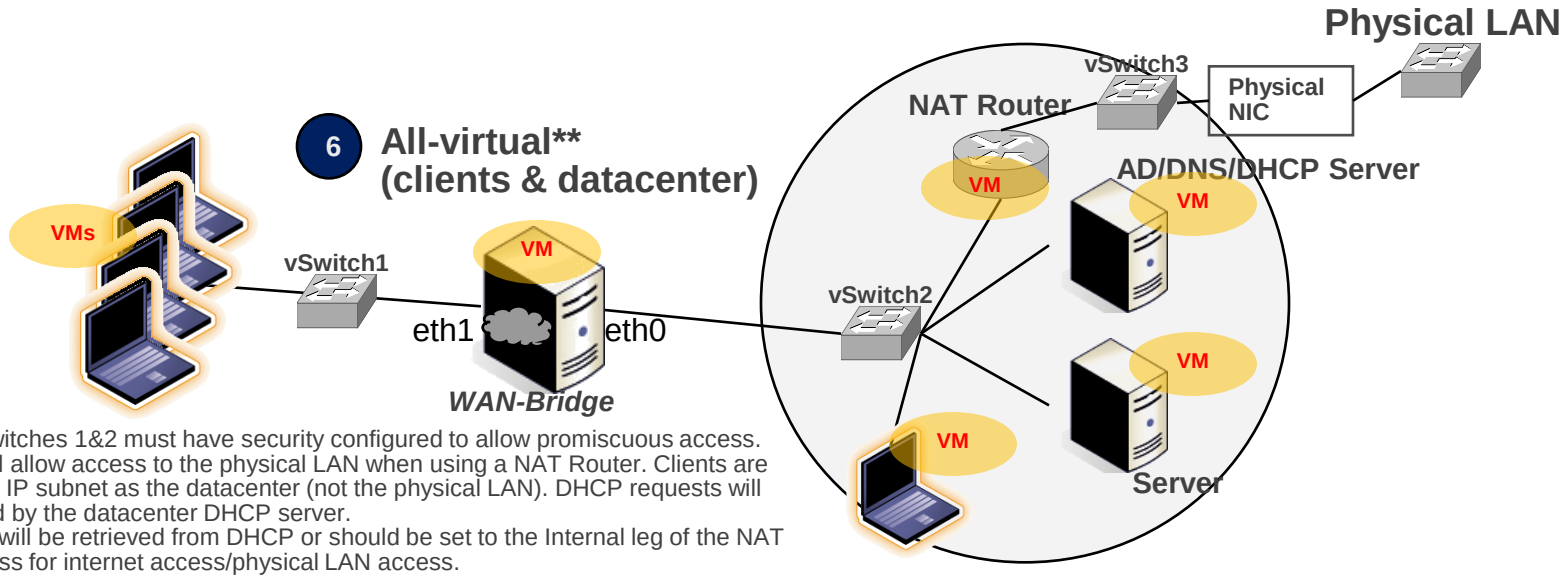
**** Note**: VMNET0 (default bridged-mode) will allow access to the physical LAN. Clients are on the same **IP subnet** as the LAN. DHCP requests will be answered by the LAN DHCP server.
Default GW will be retrieved from DHCP or should be set to the LAN router address for internet access.

WANBridge ETH0 should face the DHCP server as the bridge will use its MAC address for lease.

Using VMWare ESX/ESXi



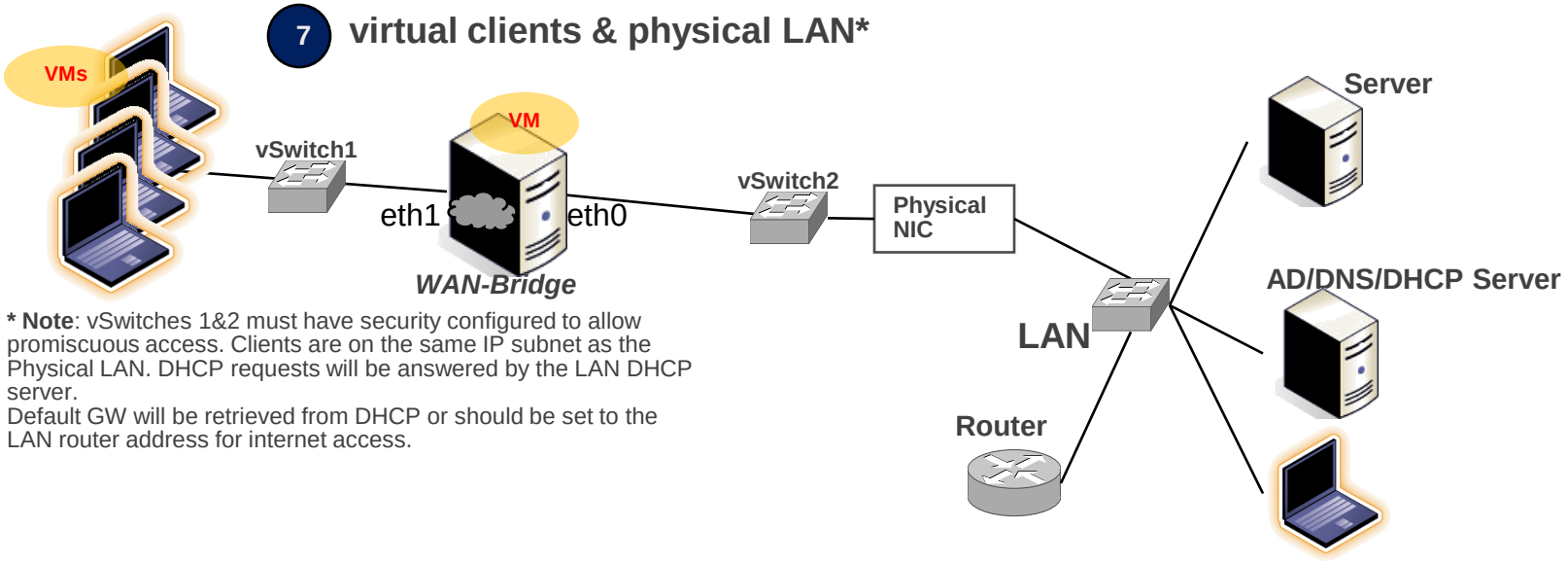
*** Note**: both vSwitches must have security configured to allow promiscuous access. Client and Server must be configured with the same IP Subnet and a static IP, unless the server is also a DHCP server. Default GW should be set to 127.0.0.1
WANBridge nTop interface can be accessed from Server or Client.



**** Note**: vSwitches 1&2 must have security configured to allow promiscuous access. vSwitch3 will allow access to the physical LAN when using a NAT Router. Clients are on the same IP subnet as the datacenter (not the physical LAN). DHCP requests will be answered by the datacenter DHCP server.
Default GW will be retrieved from DHCP or should be set to the Internal leg of the NAT router address for internet access/physical LAN access.

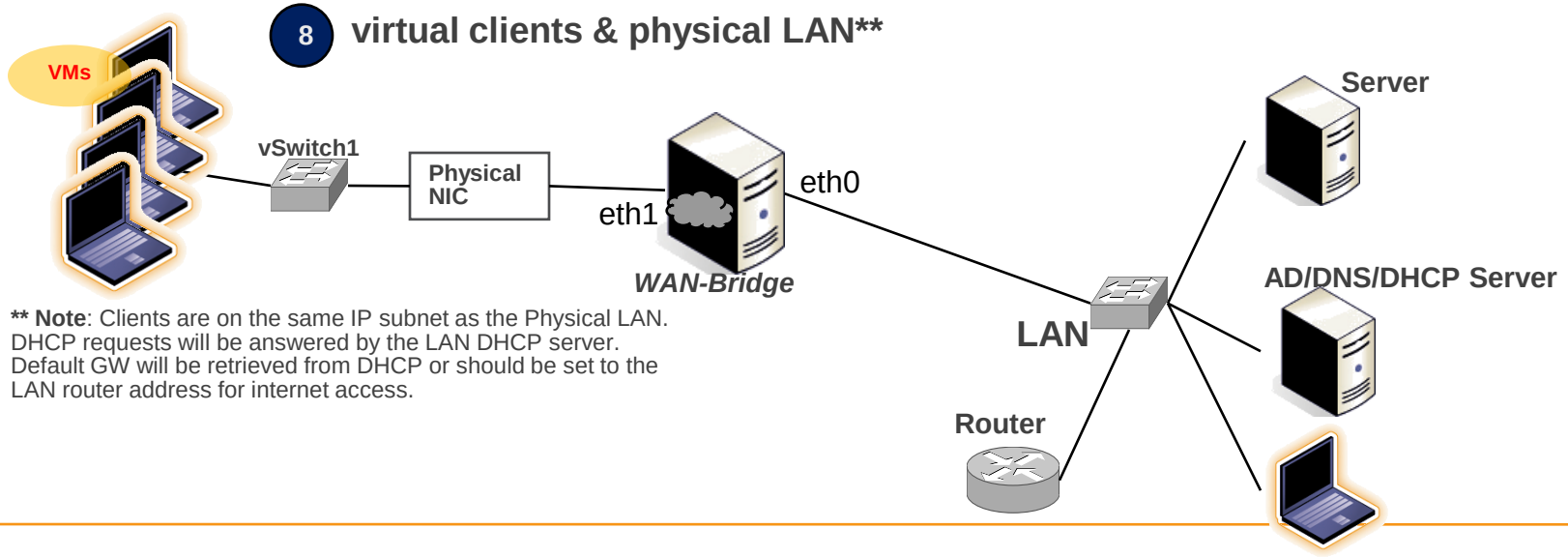
Using VMWare ESX/ESXi

7 virtual clients & physical LAN*



*** Note**: vSwitches 1&2 must have security configured to allow promiscuous access. Clients are on the same IP subnet as the Physical LAN. DHCP requests will be answered by the LAN DHCP server.
Default GW will be retrieved from DHCP or should be set to the LAN router address for internet access.

8 virtual clients & physical LAN**



**** Note**: Clients are on the same IP subnet as the Physical LAN. DHCP requests will be answered by the LAN DHCP server.
Default GW will be retrieved from DHCP or should be set to the LAN router address for internet access.