

The Loopback Address

- **127.0.0.0 to 127.255.255.255** is reserved for loopback, i.e., a host's own address, also known as the localhost address.
 - **127.0.0.1** is typically configured as the default loopback address on operating systems.
- Used for diagnostics purposes to check that TCP/IP is correctly installed on a host's operating system.
 - When a process creates a packet destined to the loopback address, the operating system loops it back to itself without it ever interfacing with the NIC.
 - Data sent on the loopback is forwarded by the operating system to a virtual network interface within the operating system.
- If you can successfully ping 127.0.0.1 or any IP within the loopback range, then TCP/IP on your computer is properly working.
 - Ping 127.0.0.1
 - Ping localhost
 - Ping loopback