b. Routers have several access points to the network. Each interface has an IP address associated with it. In order to reach a router through a specific interface each interface must have an associated address and name with it. Figure 9.3 demonstrates the naming convention of a router and its associated interface addresses. Figure 9.4 outlines the naming of both the WAN and LAN ethernet ports of a multi-homed router. The convention of appending a w (WAN) and e (Ethernet) has been adopted for port naming.

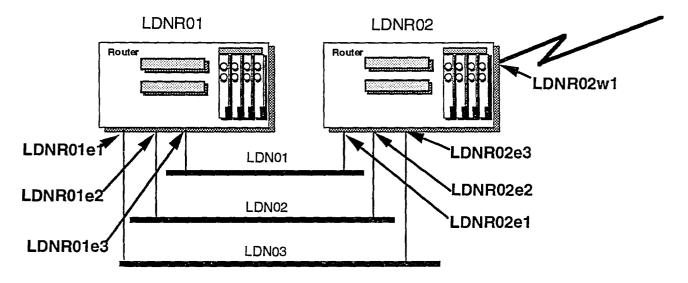


Figure 9.3: Router and Interfaces Naming Architecture

c. In assigning an IP address to routers with multiple Local Area Network interfaces assigning a consistent HOST portion, across Router Interfaces, assists network personnel in their daily operations. Consistent host address allocation is possible by reserving portions of the host address space. Hosts addresses 1 - 9 on all subnets are reserved for router connectivity.

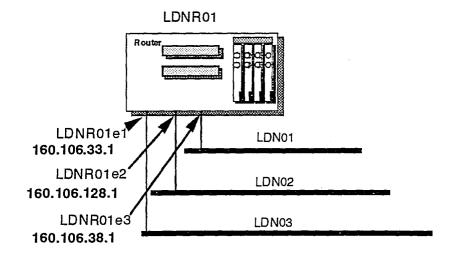


Figure 9.4: Router and Multiple LAN Interfaces