

APIPA

A Windows-based computer that is configured to use DHCP can automatically assign itself an Internet Protocol (IP) address if a DHCP server is not available. For example, this could occur on a network without a DHCP server, or on a network if a DHCP server is temporarily down for maintenance.

The Internet Assigned Numbers Authority (IANA) has reserved 169.254.0.0-169.254.255.255 for Automatic Private IP Addressing. As a result, APIPA provides an address that is guaranteed not to conflict with routable addresses.

After the network adapter has been assigned an IP address, the computer can use TCP/IP to communicate with any other computer that is connected to the same LAN and that is also configured for APIPA or has the IP address manually set to the 169.254.x.y (where x.y is the client's unique identifier) address range with a subnet mask of 255.255.0.0. Note that the computer cannot communicate with computers on other subnets, or with computers that do not use automatic private IP addressing. Automatic private IP addressing is enabled by default.