

Advanced problems and solutions for Network Connections

Identify the Problem	Probable Causes	Possible Solutions
A device can connect to a network device by the IP address but not by the host name.	Incorrect host name.	Re-enter the host name.
A device can connect to a network device by the IP address but not by the host name.	Incorrect DNS settings.	Re-enter the IP address of the DNS server.
A device can connect to a network device by the IP address but not by the host name.	DNS server is not operational.	Restart the DNS server.
The device does not obtain or renew the IP address on the network.	The computer is using a static IP address from a different network.	Enable the computer to obtain an IP address automatically.
The device does not obtain or renew the IP address on the network.	Firewall is blocking DHCP.	Change the firewall settings to allow DHCP traffic.
The device does not obtain or renew the IP address on the network.	DHCP server is not operational.	Restart the DHCP server.
The device does not obtain or renew the IP address on the network.	Wireless NIC is disabled.	Enable Wireless NIC.
An IP address conflict message displays when connecting a new device to the network.	The same IP address is assigned to two devices on the network.	Configure each device with a unique IP address.
An IP address conflict message displays when connecting a new device to the network.	Another computer has been configured with a static IP address that was already assigned by the DHCP server.	Configure the DHCP to exclude the static IP address from assignments and reboot all affected devices.
A device has network access but does not have internet access.	The gateway IP address is incorrect.	Configure the correct gateway IP address on the device or on the DHCP server.
A device has network access but does not have internet access.	A router is configured incorrectly.	Reconfigure the router settings.
A device has network access but does not have internet access.	DNS server is not operational.	Restart the DNS server.
Users are experiencing slow transfer speeds, weak signal strength, and intermittent connectivity on the wireless network.	Wireless security has not been implemented allowing unauthorized users access.	Implement a wireless security plan.

Identify the Problem	Probable Causes	Possible Solutions
Users are experiencing slow transfer speeds, weak signal strength, and intermittent connectivity on the wireless network.	There are too many users connected to the access point.	Add another access point or a repeater to strengthen signal.
Users are experiencing slow transfer speeds, weak signal strength, and intermittent connectivity on the wireless network.	User is too far away from access point.	Move the access point and ensure it is centrally located.
Users are experiencing slow transfer speeds, weak signal strength, and intermittent connectivity on the wireless network.	The wireless signal is experiencing interference from outside sources.	Change the channels on the wireless network.