Why Can't You Access the Public IP from the Same Network?

This issue happens because most home routers and firewalls don't automatically handle **NAT loopback** (or **hairpinning**). NAT loopback is the feature that allows a device inside your network to access the public IP address of a service hosted inside the same network. Without this feature, the router doesn't know how to route the request for the public IP back to the server within the local network.

Solutions:

1. **Use Private IP inside the local network**:
   Since the private IP works, a simple solution is to configure your devices within the local network to use the private IP (`172.16.200.121`) for accessing your application. This is often the easiest approach.
2. **Configure NAT Loopback (Hairpinning)**:
   Some routers allow you to configure NAT loopback. This allows you to access the public IP (46.152.12.44) from devices inside your local network and have the traffic correctly routed back to your internal server. The exact method to enable this depends on your router/firewall model. Look for settings related to NAT, port forwarding, or hairpinning.
3. **DNS Configuration (Split DNS)**:
   Another approach is to configure **split DNS**. In this setup, you can configure your local DNS server to resolve the public domain (if you're using one, e.g., `yourapp.com`) to the private IP address (`172.16.200.121`) when accessed from within the local network. This allows internal devices to use the public domain name but still reach the server using the private IP.
4. **Adjust Firewall Rules**:
   If you're using a firewall between your server and the local network, ensure that it's not blocking internal traffic trying to reach the public IP. This is less common but can still happen, depending on how the firewall is configured.

In Summary:

- The **private IP** works because you're directly accessing the server within the local network.
- The **public IP** doesn't work from inside the same network because the router doesn't know how to route traffic from internal devices back to the internal server using the public IP. You need either NAT loopback, to use the private IP directly, or DNS configuration for an optimal solution.