

# Infrastructure

## Static IP Pool Setup on AT&T Fiber NVG

The image below shows how to setup a static IP pool on an AT&T Fiber device, such as an Arris NVG599.

The screenshot shows the 'Subnets & DHCP' configuration page. The navigation bar includes 'Device', 'Broadband', 'Local Network', 'Voice', 'Firewall', 'Diagnostics', and 'IP Allocation'. The 'Subnets & DHCP' section is active. The page is divided into three main sections: Private LAN Subnet, DHCP Server, and Public Subnet. The DHCP Server section is currently expanded. The Private LAN Subnet section has fields for Device IPv4 Address (192.168.7.254) and Subnet Mask (255.255.255.0). The DHCP Server section has a 'DHCP Server Enable' dropdown set to 'On', 'DHCPv4 Start Address' (192.168.7.64), 'DHCPv4 End Address' (192.168.7.253), and a 'DHCP Lease' field set to 7 days, 0 hours, 0 minutes, and 0 seconds. The Public Subnet section has 'Public Subnet Mode' and 'Allow Inbound Traffic' dropdowns set to 'On', 'Public Gateway Address' (99.49.238), 'Public Subnet Mask' (255.255.255.248), 'DHCPv4 Start Address' (99.49.233), 'DHCPv4 End Address' (99.49.233), and 'Primary DHCP Pool' radio buttons for 'Private' and 'Public' (with 'Public' selected). The Cascaded Router section has 'Cascaded Router Enable' set to 'Off'. A 'Help' section on the right provides detailed explanations for each field.

**Subnets & DHCP**

Making a change to some pulldowns on this page will automatically change the context below it, enabling you to fill only the appropriate fields for the change you have made.  
\* all IP addresses and netmasks must be in IPv4 format nnn.nnn.nnn.nnn

**Private LAN Subnet**

Device IPv4 Address: 192.168.7.254  
Subnet Mask: 255.255.255.0

**DHCP Server**

DHCP Server Enable: On  
DHCPv4 Start Address: 192.168.7.64  
DHCPv4 End Address: 192.168.7.253  
DHCP Lease: Days: 7, Hours: 0, Minutes: 0, Seconds: 0  
e.g. 01:00:00:00

**Public Subnet**

Public Subnet Mode: On  
Allow Inbound Traffic: On  
Public Gateway Address: 99.49.238  
Public Subnet Mask: 255.255.255.248  
DHCPv4 Start Address: 99.49.233  
DHCPv4 End Address: 99.49.233  
Primary DHCP Pool:  Private  Public

**Cascaded Router**

Cascaded Router Enable: Off

**Help**

DHCP server functionality enables the device to assign a "private" IP address and other parameters that allow network communication to your LAN devices. This feature simplifies network administration because the device maintains a list of IP address assignments.

**Device IPv4 Address:** Specifies the LAN IPv4 address of the device itself.

**Subnet Mask:** Specifies the common Class C subnet.

**DHCP Server Enable:** Specifies if the device will hand out leases to LAN-side clients.

**DHCPv4 Start Address:** Specifies the first address in the DHCP address range. You can reserve a sequence of up to 253 IP addresses within a subnet, beginning with the specified address, for dynamic assignment.

**DHCPv4 End Address:** Specifies the last address in the DHCP address range.

**DHCP Lease:** Specifies the default length for DHCP leases issued by the device. Enter lease time in dd:hh:mm:ss format.

**Public Subnet Mode:** Using a public subnet means that IP addresses assigned to LAN clients will be public addresses.

**Allow Inbound Traffic:** When enabled, connections to LAN-side devices are allowed to be initiated from the WAN side. This opens the LAN devices on the Public Subnet to potentially malicious traffic, so care should be taken to ensure the LAN-side devices are properly protected. (Firewall-enabled)

**Public Gateway Address:** The IP address of the public subnet.

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