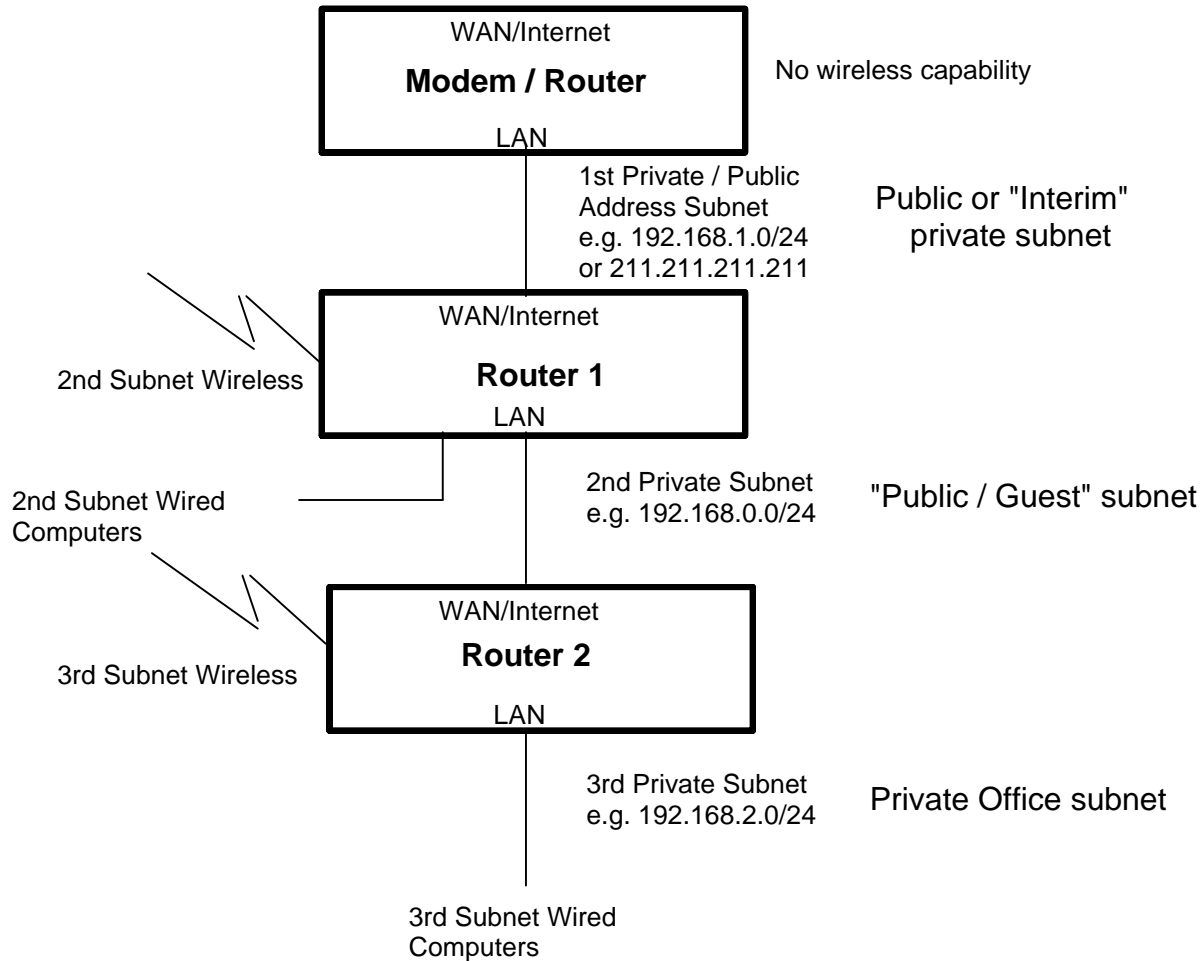# Network Architecture for 2 or More Isolated Subnets on One Internet Gateway

Simplest, most often used method. Doesn't require the Modem to be a Router

```
          ┌─────────────────────────────┐
          │ WAN/Internet                │     No wireless capability
          │      Modem / Router         │
          │ LAN                         │
          └─────────────────────────────┘
                       │
                       │   1st Private / Public
                       │   Address Subnet          Public or "Interim"
                       │   e.g. 192.168.1.0/24       private subnet
                       │   or 211.211.211.211
          ┌─────────────────────────────┐
  2nd Subnet Wireless │ WAN/Internet                │
          │      Router 1               │
          │ LAN                         │
          └─────────────────────────────┘
  2nd Subnet Wired     │
  Computers            │   2nd Private Subnet       "Public / Guest" subnet
                       │   e.g. 192.168.0.0/24
          ┌─────────────────────────────┐
  3rd Subnet Wireless │ WAN/Internet                │
          │      Router 2               │
          │ LAN                         │
          └─────────────────────────────┘
                       │
                       │   3rd Private Subnet       Private Office subnet
                       │   e.g. 192.168.2.0/24
  3rd Subnet Wired
  Computers
```
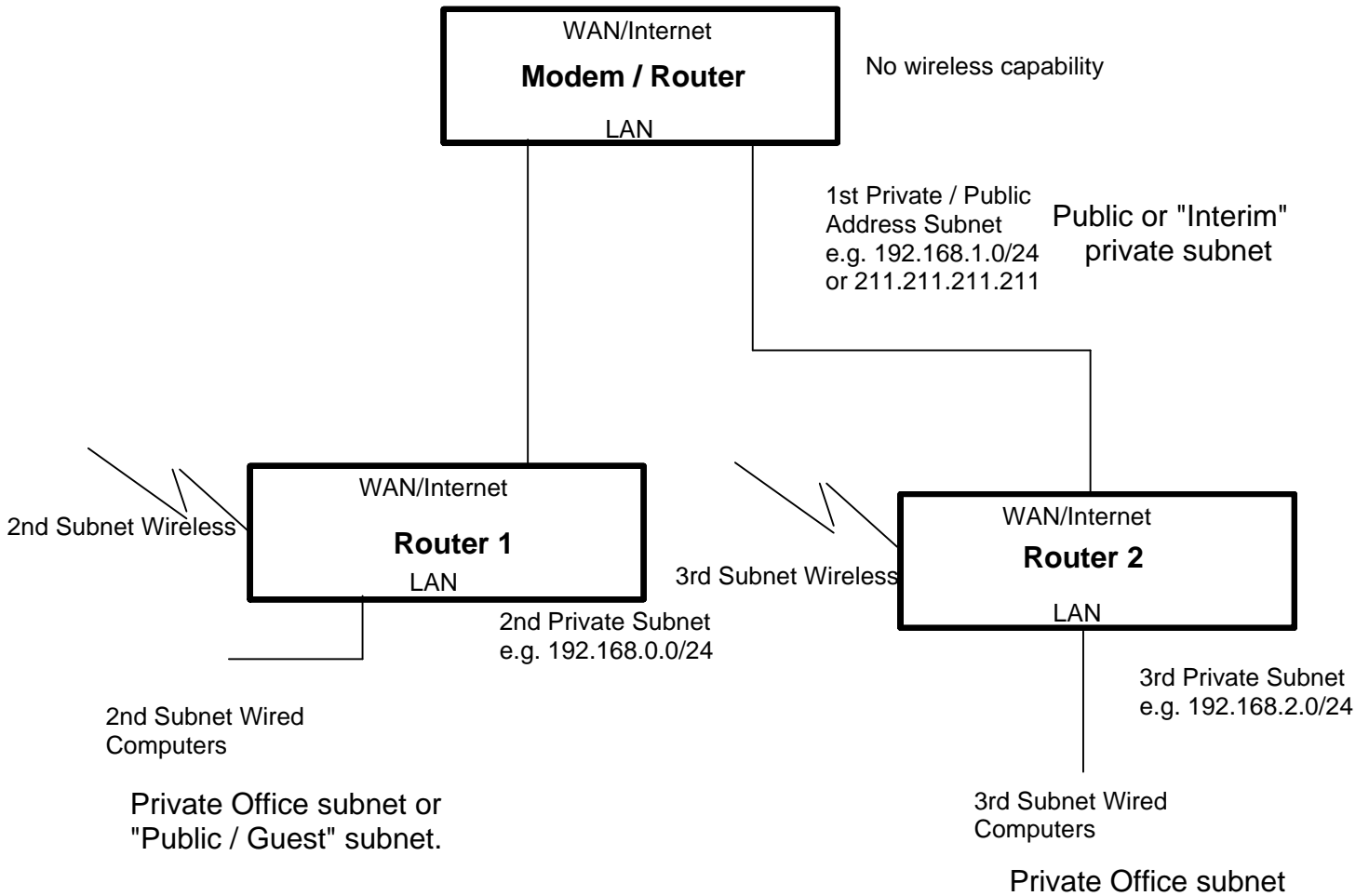
Notes:

Computers on subnet 3 can see computers on subnet 2.
Computers on subnet 2 can't see computers on subnet 3.
All computers can access the internet via the Modem.

VPNs to the Office network require at least pass-through on Router 1 and the Modem/Router.

Readily expandable to more Office subnets by adding router to LAN 1 as Router 2.

Simple, less often used method - requires Modem to also be a Router

WAN/Internet

Modem / Router

LAN

No wireless capability

1st Private / Public
Address Subnet
e.g. 192.168.1.0/24
or 211.211.211.211

Public or "Interim"
private subnet

WAN/Internet

Router 1

LAN

2nd Subnet Wireless

2nd Private Subnet
e.g. 192.168.0.0/24

3rd Subnet Wireless

WAN/Internet

Router 2

LAN

3rd Private Subnet
e.g. 192.168.2.0/24

2nd Subnet Wired
Computers

3rd Subnet Wired
Computers

Private Office subnet or
"Public / Guest" subnet.

Private Office subnet

Notes:

Computers on subnet 3 can't see computers on subnet 2.
Computers on subnet 2 can't see computers on subnet 3.
All computers can access the internet via the Modem.

VPN to office network only requires pass through in Modem.

Readily exapndable to more subnets by adding routers to Modem/Router LAN by
adding routers like Router 1 and Router 2.