**RFC 1918** 

**Request for Comment 1918** (RFC 1918), “Address Allocation for Private Internets,”is the Internet Engineering Task Force ([IETF](http://searchsoa.techtarget.com/definition/IETF)) memorandum on methods of assigning of [private IP addresses](http://whatis.techtarget.com/definition/private-IP-address) on [TCP/IP](http://searchnetworking.techtarget.com/definition/TCP-IP) [networks](http://searchnetworking.techtarget.com/definition/network).

Along with [NAT](http://searchenterprisewan.techtarget.com/definition/Network-Address-Translation) (network address tunneling), RFC 1918 facilitates expansion of the usable number of IP addresses available under IPV4, as a stopgap solution to prevent the exhaustion of public IPs available before the adoption of [IPV6](http://searchenterprisewan.techtarget.com/definition/IPv6). It’s not necessary to register private IPs with a Regional Internet Registry ([RIR](http://searchnetworking.techtarget.com/definition/Regional-Internet-Registry-RIR)), which simplifies setting up private networks.

RFC 1918 was used to create the standards by which networking equipment assigns [IP addresses](http://searchwindevelopment.techtarget.com/definition/IP-address) in a private network. A private network can use a single public IP address. The [RFC](http://whatis.techtarget.com/definition/Request-for-Comments-RFC) reserves the following ranges of IP addresses that cannot be routed on the Internet:

* 10.0.0.0 - 10.255.255.255 (10/8 prefix)
* 172.16.0.0 - 172.31.255.255 (172.16/12 prefix)
* 192.168.0.0 - 192.168.255.255 (192.168/16 prefix)

IP addresses within these ranges can be assigned within a private network; each address will be unique on that network but not outside of it. Private IP addresses can't be communicated with directly by external computers because they are not globally unique and, as such, not [addressable](http://whatis.techtarget.com/definition/addressability) on the public Internet.

Computers on the inside of the network can communicate with the Internet through NAT.  NAT translates an IP address used within one network to a different IP address known within another network. Typically, a company maps its local inside network addresses to one or more global outside IP addresses and unmaps the global IP addresses on incoming packets back into local IP addresses.