

Private IP addresses and network address translation

The use of private addressing and [NAT](#) ^[1] permits even fairly large organisations to make the best use of a small block of addresses allocated from the globally unique IP address space, and assists in conserving this limited Internet resource.

[RFC](#) ^[1] 1918, *Address Allocation for Private Internets* ^[2], sets out the rules for using a set of reserved numbers (private addresses) for hosts on a local network. [IANA](#) ^[1] has guaranteed that these addresses will never be used publicly on the Internet.

Since privately addressed nodes on a network do not have a presence on the Internet, there has to be a method by which these addresses are translated to globally routable numbers. This translation service is provided by NAT, which allows packets to be sent and received from outside the local network. Queries about private addressing and NAT may be sent to the [Janet Service Desk](#) ^[3]. FE and specialist colleges may contact their [JISC RSC](#) ^[1] for assistance on the use of private address space.

Source URL: <https://community.jisc.ac.uk/library/janet-services-documentation/private-ip-addresses-and-network-address-translation>

Links

[1] <http://www.ja.net/services/publications/supportmanual/glossary.html>

[2] <http://www.ietf.org/rfc/rfc1918.txt>

[3] <http://www.ja.net/services/publications/supportmanual/contact.htm#jsd>