**4.2.2. Initial allocation to ISPs**

**4.2.2.1. Standard or non-multihomed**

Organizations that do not meet the requirements described in the multihomed section below (Section 4.2.2.2) must satisfy the following requirements:

**4.2.2.1.1. Use of /20**

The efficient utilization of an entire previously allocated /20 from their upstream ISP. This /20 allocation may have been provided by an ISP's upstream provider(s), and does not have to be contiguous address space. The organization must meet the requirement of efficient use of 16 /24s. For example, if an organization holds a smaller allocation, such as 12 /24s, from its upstream provider, the organization would not meet the minimum utilization requirements of a /20.

**4.2.2.1.2. Efficient utilization**

Demonstrate efficient use of IP address space allocations by providing appropriate documentation, including assignment histories, showing their efficient use. ISPs must provide reassignment information on the entire previously allocated block(s) via SWIP or RWhois server for /29 or larger blocks. For blocks smaller than /29 and for internal space, ISPs should provide utilization data either via SWIP or RWhois server or by providing detailed utilization information.

**4.2.2.1.3. Three months**

Provide detailed information showing specifically how a /20 will be utilized within three months.

**4.2.2.1.4. Renumber and return**

ISPs receiving a new /20 may wish to renumber out of their previously allocated space. In this case, an ISP must use the new /20 to renumber out of that previously allocated block of address space and must return the space to its upstream provider.

**4.2.2.2. Multihomed**

When prefixes are allocated which are smaller than /20, they will be from a block reserved for that purpose. In order to receive an initial allocation from ARIN, organizations applying under the multihomed policy must:

* When requesting a /22, demonstrate the efficient utilization of a minimum contiguous or noncontiguous /23 (two /24s) from an upstream.
* When requesting a /21, demonstrate the efficient utilization of a minimum contiguous or noncontiguous /22 (four /24s) from an upstream.
* When requesting a /20, demonstrate the efficient utilization of a minimum contiguous or noncontiguous /21 (eight /24s) from an upstream.

**4.2.2.2.1. Efficient utilization**

Provide reassignment information for /29 and larger blocks using the Shared Whois Project (SWIP) or by providing the same information fields in an RWhois server. If additional address space is later requested, this information must be available at the time of the request. Utilization for blocks smaller than /29 can be documented via SWIP or RWhois server or by providing detailed utilization information.

**4.2.2.2.2. Three months**

Provide information showing that the requested IP address space will be utilized within three months and demonstrating an intent to announce the requested space in a multihomed fashion.

**4.2.2.2.3. Renumber and return**

Agree that the newly requested IP address space will be used to renumber out of the current addresses which will be returned to their upstream provider(s).

**4.2.2.2.4. Additional requests following the initial allocation**

To receive additional address space following the initial allocation, multihomed organizations must have returned the original IP address space to its provider in its entirety and must provide justification for a new allocation as described above in the section titled Requirements for Requesting Initial Address Space.

**4.3.1. End-users**

ARIN assigns blocks of IP addresses to end-users who request address space for their internal use in running their own networks, but not for sub-delegation of those addresses outside their organization. End-users must meet the requirements described in these guidelines for justifying the assignment of an address block.

**4.3.2. Minimum assignment**

**4.3.2.1 Single Connection**

The minimum block of IP address space assigned by ARIN to end-users is a /20. If assignments smaller than /20 are needed, end-users should contact their upstream provider.

**4.3.2.2 Multihomed Connection**

For multihomed end-users who demonstrate an intent to announce the requested space in a multihomed fashion to two or more distinct ASNs not owned or controlled by the end-user, the minimum block of IP address space assigned is a /24. If assignments smaller than a /24 are needed, multihomed end-users should contact their upstream providers. When prefixes are assigned which are smaller than /20, they will be from a block reserved for that purpose so long as that is feasible.

**4.3.3. Utilization rate**

Utilization rate of address space is a key factor in justifying a new assignment of IP address space. Requesters must show exactly how previous address assignments have been utilized and must provide appropriate details to verify their one-year growth projection. The basic criteria that must be met are:

* A 25% immediate utilization rate, and
* A 50% utilization rate within one year.

A greater utilization rate may be required based on individual network requirements. Please refer to RFC 2050 for more information on utilization guidelines.