



Form LN4
Request for IPv4 Address and Architecture
Confirmation Form



NTCF – QCO_LN4_JS
NID: 51972581-1
TITLE: NA IPv4 Request

IPv4 ADDRESS ALLOCATION AND ASSIGNMENT POLICIES

Pursuant to ARIN Number Resource Policy Manual (NRPM) and RFC2050 (Internet Registry IP Allocation Guidelines), your IP assignments and allocations from TowardEX are subject to Efficient Use requirements.

Customers are encouraged to read the latest NRPM guideline at <http://www.arin.net/policy/nrpm.html> before requesting additional IP addresses from TowardEX or any other carrier, in order to get acquainted with the proper industry adopted process for requesting Internet numbers.

There are following key requirements when requesting additional IP addresses from TowardEX, as adopted from RFC2050:

1. Customer must maintain at minimum of 80% efficient utilization of its existing IP assignments.
2. Customer must maintain an **immediate utilization rate of 25%** upon assignment of its new additional IP block.
3. Customer must maintain **50% utilization or more within 1 year** after assignment of its new additional IP block.

FAILURE TO ABIDE BY THESE POLICIES MAY IMPACT YOUR FUTURE IP ASSIGNMENT NEEDS OR RESULT IN DENIAL OF YOUR REQUEST.

Please fax completed form to +1 432-225-3784. If you have any questions, please contact lir-request@twdx.net.

SECTION 1: CUSTOMER INFORMATION

Please completely fill out this form. Failure to include required information will delay processing of your request.

01. Customer Name: _____

01a. Billing Address: _____

01b. Billing Address City: _____

01c. Billing Address State/Province: _____

01d. Billing Address Postal Code: _____

01e. Billing Address/Country: _____

01f. Telephone Number: _____

01g. Technical Contact First and Last Name: _____

01h. Technical Contact Email Address: _____

01i. Technical Contact Fax Number: _____

** OPTIONAL FIELD

01j. ARIN Org ID: (if you have one) _____

SECTION 2 (OPTIONAL): REVERSE DNS DELEGATION FOR REQUESTED IP BLOCK

If you are requesting TowardEX to delegate in-addr.arpa zones for your new IP block, please list your DNS servers below.

If you are requesting TowardEX to simply add or modify reverse DNS entry for a particular IP instead of delegating to your name server, please email that request to hostmaster@towardex.com.

Provide fully-qualified host names for the servers that will be providing in-addr.arpa name services. DO NOT LIST IP ADDRESSES.

Networks should provide at least two (but not more than thirteen) distinct name servers for providing address-to-name mapping for hosts in the network. To specify more than one server hostname, separate additional entries by using commas. Customer must be able to support **RFC2317 "Classless IN-ADDR.ARPA delegation"** in order to request delegation of reverse DNS to their own name servers.

02. Hostnames of DNS Reverse Mapping Nameserver: _____



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SECTION 3: JUSTIFICATION FOR CURRENT EXISTING IP ADDRESSES

Please list all of your current IP addresses, spaced out as shown in example below. Include IP addresses assigned by carriers other than TowardEX *IF AND ONLY IF* such third-party assigned IP addresses are being used at the same location where your TowardEX connection is being provided. Do not list RFC1918 private Internet numbers.

If you need to specify more entries, please attach them on a blank paper and check "Additional Documentation Attached."

03. IP Address / Subnet Description # of Addresses in Use

Examples:

192.168.100.101	Web Server	Single Host
192.168.101.0/28	Marketing Department	13
192.168.101.16/28	Engineering	8

03b. Additional Documentation Attached: STMT ATTACHED

SECTIONS 4 AND 5: REQUEST FOR ADDITIONAL IP BLOCK

Specify how many IP addresses you are requesting by using either CIDR prefix length (i.e. /27), a network subnet mask (i.e. 255.255.255.0) or by simply by stating how many host addresses you are looking for.

04a. Prefix length or # of IP addresses requested: _____

Provide a complete numbering topology detailing how you are planning on utilizing new IP addresses in the format below. If you need to specify more entries, please attach them on a blank paper and check "Additional Documentation Attached." Since you do not currently have your new allocation yet, use RFC1918 subnet numbers to list different subnets (i.e. 10.1.0.0/27, 10.1.1.0/24, etc) in describing how you are planning to use your new addresses.

05. IP Address / Subnet Description # of addresses to be used immediately

Examples:

192.168.100.101	Web Server	Single Host
192.168.101.0/28	Marketing Department	13
192.168.101.16/28	Engineering	8

05b. Additional Documentation Attached: STMT ATTACHED



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Indicate the total number of new hosts you are expecting to be numbering out of your new IP block in the **next 3 months**.

05c. # of addresses in use
after 3 months: _____

Indicate the total number of new hosts you are expecting to be numbering out of your new IP block in the **next 6 months**.

05d. # of addresses in use
after 6 months: _____

Indicate the total number of new hosts you are expecting to be numbering out of your new IP block in the **next 12 months**.

05e. # of addresses in use
after 12 months: _____

Provide any additional information for us to consider in evaluating your IP request:

05f. Additional Information:
If you are attaching a network diagram or
any other specific supporting documentation,
please do so in Section 7.

SECTION 6: ARCHITECTURE CONFIRMATION

Provide the Circuit ID of your TowardEX connection where you want your new IP addresses routed to. If you are an EasyColo™ Customer, specify your Server ID (SID) instead. To specify multiple circuits or SID numbers, separate additional entries using commas. If you are unsure about your Circuit ID/SID number or otherwise not sure about how to fill out the details below, please contact support@towardex.com.

06. Route New Addresses to Circuit ID or SID:
If specifying more than one, separate
using commas.

Indicate how you want your new IP addresses to be routed to the above listed circuits. Specify either "BGP" or "STATIC." If unsure, specify "STATIC."

06a. Routing Type (Static or BGP): _____



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Indicate whether you are connecting a Layer-2 or lower device (i.e. Switch or Hub), or a Router to the above listed circuits. If you specified "BGP" for field 06a., write "ROUTER" below. **IMPORTANT!** Customers using IP address space bigger than a /24 (more than 256 hosts) are REQUIRED to terminate their TowardEX connection on a Router or Layer-3 switch device. Customers refusing to terminate their connection on a router when using more than /24 address space in bridged configuration will be assessed a monthly fee of \$100/month. Without a router at customer side of the circuit, every time a new host is brought online at customer network, a MAC address and ARP entry must be created and maintained at TowardEX side of the connection. The maintenance of customer MAC addresses is costly due to limited Ternary Content Addressable Memory (TCAM) resources at TowardEX Network. In order to avoid TCAM exhaustion while serving hundreds of our Internet customers, those using a lot of IP addresses (larger than /24) must use a router/Layer-3 switch or pay for a TCAM overuse fee of \$100/month.

06b. CPE Type (Switch, Router or Single Host): _____

SECTION 7: DETAILED SUPPORTING DOCUMENTATION FOR IP REQUEST

If you are requesting /26 (64 addresses) or larger space of IP block, you are required to provide a detailed network diagram providing the following information:

1. A topology diagram showing how you plan to utilize IP addresses from TowardEX. **Acceptable electronic forms of submission of netmaps are GIF, JPG, ASCII TXT and Microsoft Visio file.**

ALERT: FAILURE TO PROVIDE THIS INFORMATION WHEN REQUESTING /26 OR LARGER IP BLOCK WILL EITHER DELAY OR RESULT IN DENIAL OF YOUR REQUEST.

IF YOU ARE REQUESTING AN IP BLOCK LESSER THAN 64 IP ADDRESSES, YOU ARE NOT REQUIRED TO PROVIDE THIS INFORMATION.

----- Provide Supporting Documentation below or by attaching additional pages to your submission. If you want to submit electronically, send it to lir-request@twdx.net. -----

07. Supporting Documentation Attached: