How to apply for Internet Resources

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Main Reasons to have independent Internet Resources

- Internet is no more just a communication “supporting actor” to became the main actor. In some cases, the main communication media.
- Many organizations rely on the Internet for their business.
- It is an important corporate communication tool for almost all organizations.
- For those organizations, it is becoming more important to have near 100% connection availability.
- To become provider independent is one of the ways to get this.
  * Allow having more than one simultaneous connection (multihoming).
  * Allow connecting to a IXP (Internet Exchange Point).
- The bigger the organization the bigger the number of IP addresses in use. This might put some burden when changing from one ISP to another (renumbering).
Internet Resources under LACNIC admin.

- IPv4 address blocks:
  186/8, 187/8, 189/8, 190/8, 200/8 y 201/8 + Bloques ERX

- IPv6 address blocks:
  2001:1200::/23, 2800:0000::/12

- ASN (Autonomous System Numbers):
  26592 - 26623
  27648 - 28671
  52224 - 53247
  262144 - 263167 (32 bits ASNs)
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<tr>
<th>Country 1</th>
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<td>South Georgia and the South Sandwich Islands</td>
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<td>Trinidad y Tobago</td>
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<td>Venezuela</td>
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LACNIC servers 29 territories in the Latin America and Caribbean
Requirements to Request Internet Resources

- Be established on the coverage area (Latin America and Caribbean);
- Comply with current policies
- No need to be a LACNIC member in order to request resources;
  The organization automatically becomes a members once approved for an allocation.
  An organization ID will be assigned to this organization once approved.
Templates for Resources requesting

☑ One specific template for each resource type;
☑ On the following links, information about the policies and template;
☑ Templates should be sent on Text (ASCII) format

Internet resource request process

- Download, fill up and send the template message to hostmaster@lacnic.net
- Once received, a ticket will be generated;
- Analysis process begins. Making sure there is a proper need and it is in accordance with current policies.
- Additional information might requested during this process;
- Once decision taken, email is sent informing it.
- In case of approval, message indication next steps;
  - Sign agreement;
  - Pay registration fee;
Internet resource request process

Finally...

- Once agreement is received and fee payed, the resource is allocated/assigned.

Resources registered on the database (whois), and ready to be used.
Registration Services Agreement

- What is it
  - Basically, establishes services to be provided by LACNIC for those receiving resources;
  - It also establishes rights and obligations of both organizations (LACNIC and requester);

- Important to understand:
  - It is a adhesion agreement;
  - Every single organization receiving resource from LACNIC has to sign it;
  - The agreement is only needed to be signed at the first time an organization receives resource from LACNIC;
  - To be signed in two copies and sent by postal mail. One of the signed copies to be sent back with LACNIC signature.
How much time?

- In general, it is pretty simple and quick process;
- There might be the need for some rounds of questions/checking;
- In case responses from the requesters side are also quick, it should take *no more than one week*;
- Our compromise to answer every message in one business day.
- Signing and payment may delay the process a little from the requester side.
Internet Service Providers and End users

- **Internet Service Providers** (ISPs) are those organizations using Internet Resources as part of its infrastructure to provide services to third parties (customers). Example, Internet connection, dedicated hosting, etc.

- In the other hand, organizations exclusively using the Internet Resources on their own internal infrastructure are considered “End Users”.
Multi-homed and Single-homed

- A site is multi homed if connected full time to more then one independent Internet upstream provider

  Independent Internet provider is when one does not use the other to reach the Internet

- A single homed site, is the one connected exclusively through one single Internet upstream provider
IPv4 request from ISP

- Micro allocation /21 (2048 addresses);
  * Demonstrate usage or immediate need for a 512 IP addresses.
  * Present a detailed plan of how the requested block will be used in one year.

- /20 (4096 addresses) or more;
  * Currently efficiently using at least 1024 IP addresses.
  * Present a detailed usage plan for 3, 6 and 12 months
  * Be multi homed.
    * In case of being single homed, needs to show efficient utilization of at least 2048 addresses
IPv4 request from a End user

- minimum assignment size /24 (256 addresses);
  * Demonstrate efficient utilization of 128 addresses
  * Be multi homed
- If single-homed, minimum assignment size /20 (4096 addresses);
  * Demonstrate efficient utilization of 2048 addresses
ASN Request

- To different possibilities/scenarios:
  * Unique routing policy;
  * Or a network with more than one independent connection to Internet (multi homed site).

- For ASN request, no differentiation between ISPs or End users
- LACNIC is already assigning 32 bits ASNs for a while now.

(*) 32 bits ASN brings no technical advantage compared to 16 bits version. It is just a countermeasure for 16 bits ASN depletion
IPv6 Request

- For ISPs, minimum allocation size /32
  * Provide IPv6 service and connectivity plan;
  * Compromise to announce only the aggregated prefix to the routing system in no longer then 12 months;
  * Provide IPv6 services in no longer then 24 months;
- To End users, minimum assignment size /48 and maximum /32
  * Address distribution plan considering one year. Number of end points per subnet and detailed description of network topology;
  * In the case where the IPv6 is going to be announced, to compromise in announcing only the aggregated block;
Example of a template

# ATENCION: Lea atentamente los comentarios correspondiente a cada
# campo de este formulario, cualquier duda, sugerencia o comentarios
# no dude en comunicarse con hostmaster@lacnic.net

# El llenado incorrecto de un campo puede derivar en el rechazo
# automatico de su solicitud.

# No remover esta linea.
LACNIC ASN Template 20080827-SP

# Envie este formulario para hostmaster@lacnic.net

# Datos de la Organizacion.
# Si su organizacion ya tiene algun recurso registrado con LACNIC por
# favor informar el "OwnerId" de la Organizacion tal
# como esta registrado en nuestro sistema. En caso de no saber cual
# es el "OwnerId" consulte algun recurso adjudicado a su organizacion
# utilizando el servidor WHOIS de LACNIC:
# http://whois.lacnic.net

0a. ID. de la Organizacion (OwnerId):
0b. Nombre de la Organizacion:
0c. Direccio Postal:
0d. Ciudad:
0e. Estado:
0f. Pais:
0g. Codigo Postal:
Ej. formulario de solicitud de recursos

# Puntos de contacto en la organización.
# Es necesario informar el contacto técnico y de facturación. El contacto de facturación es interno y por esto no es visible en las consultas whois. Informar solamente el "UserID" de los puntos de contacto.
# En el caso que no los tenga aún, se los debe crear en:
# http://lacnic.net/newid/SP

1a. ID. contacto técnico (UserID):
1b. ID. contacto facturacion (UserID):

# Indicar "M" para organizaciones multi-homed, "U" para organizaciones con política única de ruteo.

2a. Multihomed (M), Política Única (U):

# Brindar información sobre el protocolo de ruteo a ser utilizado y los Bloques IPs que van a ser anunciados con origen en el ASN solicitado.

3a. Protocolo de ruteo:
3b. Bloques IPs:

# Brindar información sobre los proveedores de Internet.
# Copie los campos a continuación si tiene más de 2 proveedores.

4a. Nombre del proveedor:
4b. ASN del proveedor:
4c. Estado de la conexión:
4d. Telefono:
4e. E-Mail:
Ej. formulario de solicitud de recursos

# En el caso de organización con política de ruteo única y distinta
# de la utilizada por el proveedor, describa en detalles esta
# política única de ruteo.

5a. Política única de ruteo:
# En este punto se puede brindar información adicional acerca de su
# organización, incluso se puede aclarar algún punto si lo desea.

6a. Información Adicional:
# No remover esta línea.
Final del formulario
Thank you