RIPE ncc

Supporting Notes for the European IP Address Space Request Form

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Obsoletes: ripe-128, ripe-137, ripe-138

See also: ripe-159, ripe-141

Introduction

To make appropriate assignment decisions, information must be gathered about the organisation, addressing requirements, network infrastructure, current address space usage and the future plans of the end user requesting address space. The European IP Address Space Request Form (ripe-141) is a tool for gathering the information necessary to evaluate the request and to ensure that the same guidelines are applied to each assignment.

This document contains instructions for completing the form consisting of the templates contained in ripe-141. An example of a completed form is given in Section 4. A separate form must be filled out on behalf of each separate enterprise. (Do not include requests for several customers in one form).

The policies and procedures to be followed in making IP address space assignment decisions are described in ripe-159, "European Internet Registry Policies and Procedures." Please refer to this document if you have any questions on policy.

As stated in ripe-159, address space assignments are valid as long as the original criteria on which the assignment was based remain true. If an assignment is made for a specific purpose and the purpose no longer exists, the assignment is no longer valid.

1. Instructions for Network Administrators

After completing this form, send it to the Internet Service Provider that gave it to you. Any questions should be referred to them. For detailed instructions, skip to Section 3.

2. Instructions for the Local IR (ISP)

When sending the completed ripe-141 form to the RIPE NCC, all information requested in the first three sections of the form is must be supplied. In some cases, the RIPE NCC will request additional information. The more information you provide, the more easily the hostmasters can understand the end user's network setup, and the faster a decision be made. Therefore, if you have extra information not included in the first three parts of the form, please attach it.

The form should be be sent to the RIPE NCC by the Local IR Provider processing the request, not by the network administrators, nor by another ISP. It should be submitted with e-mail to <hostmaster@ripe.net> as an ASCII text document. The form must include the Registry's Identifier (X-NCC-RegID) in the e-mail header or at the top of the form.

You can use this form to gather information from the end user and to document your IP space assignments. When using this form for your own administrative purposes, you may modify it in to fit your needs. However, a local IR is responsible to gather and maintain the information indicated on the forms for every address space assignment.

3. Instructions for the European IP Address Space Request Form (ripe-141)

I. General Information

We first gather information on the organisation in which the address space will be used.

Overview of Organisation

To assess a user's request, we must understand the structure of the organisation wanting the addresses and in which part of that organisation they would be used. In this section, a description of the organisational structure should be given. Include information on how the addresses will be distributed among the various departments. If the organisation has offices in more than one country, please specify which country will use the address space. Please include details of the parent company, subsidiaries and contact persons.

> #[OVERVIEW OF ORGANIZATION TEMPLATE]#
>
> Santa's Workshop Inc. is divided into a Development Division which includes departments for candy cane construction, toy manufacturing and reindeer training; and a Surveillance Division that oversees investigations of naughty and nice children. The Development Division is located in in Christmastown, and each department in the division has

its own subnet. The Surveillance Division is an international operation with numerous branch offices operating around the globe.

Contact Information

The requester template should contain the contact person making the request. The user template is for the organisation that will be using the address space. Each template should include the fields listed below.

Contact Information Fields

name:	The full name of the contact person; Please don't use titles like "Dr." and do not add a dot (".") between names or initials.
organisation:	The full name of the organisation.
country:	The ISO 3166 two letter country code for the country where the contact person is located; If you don't know the country code, you can fill in the full name of the country (in English).
phone:	The work telephone number of the person listed above; Specify the number with + <country code> <area code> <telephone number>.
fax-no:	The fax number of the person above. This field is optional.
e-mail:	e-mail address of the contact person.

#[REQUESTER TEMPLATE]#
name: *Johnny B Good*
organisation: *Antarctic Internet Company*
country: *NN (or Northern Nowhere)*
phone: *+12 21 111 2222*
fax-no: *+12 21 222 1111*
e-mail: *jbgood@antarctic.nn*

#[USER TEMPLATE]#

name: *Santa A Claus*
organisation: *Santa's Workshop Inc.*
country: *NN*
phone: *+12 12 122 2121*
fax-no: *+12 12 221 1212*
e-mail: *santa@antarctic.nn*

Current Address Space Usage

In this section, please show how the organisation is using all address space that has been assigned to it in the past, and what its future plans are for that

space. Do not include information here for the address space they are requesting nor about private address space they may be using.

Include an entry for each physically separate subnet in the network. Subnets are considered to be physically separate if there is an IP router between them.

Current Address Space Usage Fields

Prefix: The position in the assigned address space at which the addresses in this subnet start.

Subnet mask: The subnet mask of each entry.

Size: The size of the subnet, which determines the maximum number of network interfaces that can be incorporated in the subnet.

Addresses Used: In these three fields, show the current and estimated usage for the next two years. Include interfaces used for hosts, routers, gateways, terminal concentrators, printers and any other machines requiring one or more network interfaces.

Current: The number of network interfaces currently used in the subnet.

1-yr: The number of network interfaces to be used in one year.

2-yr: The number of network interfaces to be used in two years.

Description: Used to specify a short but semantically meaningful description of the role of the subnet in the user's organisation.

#[CURRENT ADDRESS SPACE USAGE TEMPLATE]#

			Addresses Used			
Prefix	Subnet Mask	Size	Current	1-yr	2-yr	Description
193.1.193.0	255.255.255.192	64	28	34	60	Candy Cane Dept.
193.1.193.64	255.255.255.224	32	10	21	28	Toy Design
193.1.193.96	255.255.255.224	32	8	13	27	Toy Manufacture
193.1.193.128		128				Unused
193.1.194.0	255.255.254	512	317	429	480	Reindeer Training
193.1.196.0	255.255.255	256	132	200	230	Naughty or Nice
		1024	495	697	825	Totals

II. The Request

Request Overview

Information supplied in the request overview templates helps to evaluate and process your request. It will be kept in confidence and is for internal use only. The information will **not** be entered into the RIPE Network Management Database.

Request Overview Fields

request-size:	The number of addresses being requested.
addresses-immediate:	The number of addresses that will be used immediately following the assignment; In these fields only include the new addresses that the organisation is requesting, not addresses they already have.
addresses-year-1:	The number to be used within 12 months.
addresses-year-2:	The number to be used within 24 months.
subnets-immediate:	The number of subnets to be used immediately.
subnets-year-1:	The number to be used within 12 months.
subnets-year-2:	The number to be used within 24 months.
****inet-connect:**	Whether or not the organisation concerned plans to connect to the Internet. Please use the option that most closely describes the position of the organisation: Will never connect; Already connected through <provider name>; Plan to connect <date> <provider name>
country-net:	The ISO 3166 two letter country code of the country where the network is located. For international enterprises, specify the country in which the network that will use the addresses is located.
private-considered:	Has the requester considered using private address space for the organisation instead of, or in addition to, a public IP address; "Yes" or "no" is sufficient. More information is welcome.
request-refused:	If the organisation has had a request refused in the past, please give the name of the provider that refused the request and an explanation for the refusal.
PI-requested:	"Yes" if address space requested is provider independent; "No" otherwise. (see ripe-159)
address-space-returned:	If the user is returning any address space, specify the range of addresses that will be returned, to whom and before what date. Use the following format: <x.x.x.x - x.x.x.x> to <name> before <yymmdd>

****NOTE: Prior to assigning address space, it is essential to know if the end user requesting address space is already connected to the Internet. If so, then the selection of appropriate address space for this user may depend on which provider currently supplies connectivity. If the user is not connected, but is planning to be, this should also be taken into account. This information is essential if the conservation and aggregation goals of the public address space distribution are to be met. If the organisation is not planning to connect to the internet in the near future, please consider the recommendations in "Address Allocation for Private Internets" (RFC1918).**

#[REQUEST OVERVIEW TEMPLATE]#

request-size: *256*
addresses-immediate: *120*
addresses-year-1: *171*
addresses-year-2: *202*
subnets-immediate: *6*
subnets-year-1: *7*
subnets-year-2: *7*
inet-connect: *Already connected through Antarctic Internet Company*
country-net: *NN*
private-considered: *yes*
request-refused: *yes, by Antarctic Inet because we believe reindeer can fly.*
PI-requested: *no*
address-space-returned: *192.0.2.0 - 192.0.2.255 to Antarctic Inet on 960623*

Addressing Plan

In this section, specify how the organisation plans to use the requested addresses. Only include information about the public address space being requested. Use of private address need not be described. Like the "current address space usage" template, the addressing plan is a table in which every subnet is specified.

Include an entry for each physically separate subnet in the network. To conserve address space, the start positions of the subnets should be selected to minimise padding in the address space. In the example bellow, we arrange the rows in decreasing order of the Size fields to achieve an optimal packing of the address space. The size of every valid request for address space will be the sum of all sizes of the subnets specified in the addressing plan.

Addressing Plan Fields

Relative Prefix: The relative position in the assigned address space at which the addresses for this subnet will start. The relative position of the first subnet is always 0.0.0.0. For each subsequent subnet, the start position is selected to allow for the total number of hosts in the Size fields of the subnets which precede it.

Subnet mask: The subnet mask of each entry.

Size: The size of the subnet, which determines the maximum number of network interfaces that can be used in the subnet. This must be a power of two.

Addresses Used: In these three fields, show the planned usage of the requested address space for the next two years. Include interfaces that will be used for hosts, routers, gateways, terminal concentrators, printers and any other machines requiring one or more network interfaces.

Immediate: The number of network interfaces to be used immediately following the assignment.

1-yr: The number of interfaces to be used in 12 months.

2-yr: The number of interfaces to be used in 24 months.

Description: Specify a short but semantically meaningful description of the role of the subnet in the user's organisation.

#[ADDRESSING PLAN TEMPLATE]#

Relative			Addresses Used			
Prefix#	Subnet Mask	Size	Immediate	1yr	2yr	Description
0.0.0.0	255.255.255.128	128	80	95	100	Toy Design
0.0.0.128	255.255.255.224	32	12	17	25	Toy Manufacture
0.0.0.160	255.255.255.224	32	0	15	28	Elf Personnel
0.0.0.192	255.255.255.240	16	7	8	10	Naughty or Nice North
0.0.0.208	255.255.255.240	16	10	14	14	Naughty or Nice South
0.0.0.224	255.255.255.240	16	10	12	12	Naughty or Nice East
0.0.0.240	255.255.255.240	16	8	10	13	Naughty or Nice West
		256	120	171	202	Totals

III. Database Information

Network Template

This is the information that **will** be entered in the RIPE database about the organisation requesting the address space. To obtain practical information on using the RIPE database, try:

whois -h whois.ripe.net help

Network Template Fields

inetnum:	Specifies the IP address range that will be assigned to the enterprise. It will be filled out by the Local IR (or the RIPE NCC in exceptional cases) after the request is approved. It is needed when sending the object to the database. The field can be left blank in the form.
netname:	A concise, descriptive name for the network; The "netname" is used for administrative purposes like Internet Registry consistency checking. Valid characters are capital letters, numbers and dash. Use *whois* to check that the netname is not already in use.
descr:	A short description of the organisation, including the location; The full postal address is not needed as this is provided in the person template (see below).
country:	The ISO 3166 two letter country code which is most appropriate for the organisation; For networks that will cross international boundaries, choose the country in which the administrative contact is based. If you don't know the appropriate country code, use the full name of the country.
****admin-c:**	The NIC handle of the person who is the administrative contact for the network; The administrative contact must be someone who is physically located at the site of the network. More than one contact can be specified by adding more "admin-c" fields.
****tech-c:**	The NIC handle of the technical contact person; The technical contact person does not have to be physically located at the site of the network. There can be more than one name specified in multiple fields for this template.
status:	Specifies whether the request is provider aggregatable or provider independent. Should be filled in with either "ASSIGNED PA" or "ASSIGNED PI".
mnt-by:	This optional field references a registered maintainer object, which spefifies authorisation checks on changes to the inetnum object in the database. More information on the database maintainer object can be found in ripe-120.
notify:	This optional field specifies an e-mail address to which notifications of changes to the object should be sent.

changed: The e-mail address of the person completing this form, followed by the date; Specify the date in the <yymmdd> format as shown in the example.

source: The source of the information. This field will always be RIPE and should already be filled in.

****NOTE:** Each person or role object in the database should contain a NIC handle which allows unambiguous identification of the appropriate persons as needed for Internet network administration. A RIPE NIC handle has the form "MK16-RIPE", but the database will also accept NIC handles that have been obtained from the InterNIC database (which have the form "DK58"). To obtain a NIC handle, just put

nic-hdl: AUTO-1

OR

nic-hdl: AUTO-1YourInitials

in the "nic-hdl:" field of the object to be added to the database. If "YourInitials" are specified (no less than 2, and no more than 4 letters), the database will use them in constructing a NIC handle. Otherwise, it will determine the letters itself. In both cases, the NIC handle is guaranteed to be unique.

You can reference these (AUTO-1 or AUTO-1YourInitials) as temporary NIC handles in the same update message in the fields of other objects that require a NIC handle (e.g. the inetnum object described above). The database software will then fill in the freshly assigned NIC handles in the objects. Note that you can also use other numbers (example: AUTO-2) so that you can add more objects in one E-mail message.

Person Template:

If contact information for the network administration persons entered in the Network Template is already in the RIPE database, then the person handling the request should check to see if it is up to date. For each person specified in the network template for which there is no entry in the RIPE database, one should now be created by using the following template.

Person Template Fields

person: The full name of the person; No official titles and no dots between the names or initials should be used.

address: The full postal address, written as it would be for an ordinary postal mail with one line for each part of the address.

phone: The work telephone number of the person mentioned above; + <country code> <area code> <telephone number>. If there is more than one phone number, put each on a separate line, starting with the most appropriate number for the person.

fax-no: The fax number of the person specified above, this field is optional.

e-mail: The e-mail address of the person specified above.

nic-hdl: The person's NIC handle

mnt-by: This optional field references a registered maintainer object, which spefifies authorisation checks on changes to the person object in the database. More information on the database maintainer object can be found in ripe-120.

notify: This optional field specifies an e-mail address to which notifications of changes to the object should be sent.

changed: The e-mail address of the person submitting the form, followed by the date; Use the <yymmdd> format for the date as shown in the example.

source: This field will be RIPE and should already be filled in.

#[NETWORK TEMPLATE]#

inetnum: *x.x.x.x/24*
netname: *XMAS*
descr: *Santa's Workshop Inc.*
descr: *Christmas Toys Manufacturing Facility*
descr: *Northern Nowhere*
country: *NN*
admin-c: *SC12-RIPE*
tech-c: *RR212-RIPE*
status: *ASSIGNED PA*
notify: *jbgood@antarctic.nn*
mnt-by: *SANTA-SECURITY*
changed: *jbgood@antarctic.nn 960412*
source: *RIPE*

#[PERSON TEMPLATE]#

person: *Santa Claus*
address: *Santa's Workshop Inc.*
address: *Jingle Bell Lane 12*
address: *1224CH Christmastown*
address: *Northern Nowhere*
phone: *+12 12 122 1122*
phone: *+12 12 122 2211 ext. 1221*
fax-no: *+12 12 122 121*
e-mail: *Santa@xmas.nn*
nic-hdl: *SC12-RIPE*
notify: *jbgood@antarctic.nn*
mnt-by: *SANTA-SECURITY*
changed: *jbgood@antarctic.nn 960412*
source: *RIPE*

#[PERSON TEMPLATE]#

person: *Rudolf R N Reindeer*
address: *Santa's Workshop Inc.*
address: *Jingle Bell Lane 21*
address: *1224CH Christmastown*
address: *Northern Nowhere*
phone: *+12 12 122 1111*
fax-no: *+12 12 122 2222*
nic-hdl: *RD212-RIPE*
e-mail:*Rudolf@xmas.nn*
notify: *jbgood@antarctic.nn*
mnt-by: *SANTA-SECURITY*
changed: *jbgood@antarctic.nn 960412*
source: *RIPE*

IV. Optional Information

In the assessment of an assignment request, additional information is always useful, especially if there are some special circumstances that affect the request. In this section, please include any information that will help the RIPE NCC make a better decision about the request.

For example, if substantial network expansion is planned, it is useful to include a deployment plan with a list of events (and planned dates) that will lead to the use of the requested addresses. A topological map of the current and planned network infrastructure can also be helpful. The map can be sent to the RIPE NCC by fax.

Information regarding special circumstances, such as the use of old systems or special purpose hardware that affects the request, should be included with the request. In some cases, the RIPE NCC may ask for information about the user's understanding of network planning and management, to be sure the estimates in the addressing plan are realistic.

4. Example of a completed ripe-141 form.

X-NCC-RegID: nn.antarctic

I. General Information

#[OVERVIEW OF ORGANIZATION TEMPLATE]#

Santa's Workshop Inc. is divided into a Development Division which includes departments for candy cane construction, toy manufacturing and reindeer training ; and a Surveillance Division that oversees investigations of naughty and nice children. The Development Division is located in in Christmastown, and each department in the division has its own subnet. The Surveillance Division is an international operation with numerous branch offices operating around the globe.

#[REQUESTER TEMPLATE]#

name: Johnny B Good
organisation: Antarctic Internet Company
country: NN (or Northern Nowhere)
phone: +12 21 111 2222
fax-no: +12 21 222 1111
e-mail: jbgood@antarctic.nn

#[USER TEMPLATE]#

name: Santa A Claus
organisation: Santa's Workshop Inc.
country: NN
phone: +12 12 122 2121
fax-no: +12 12 221 1212
e-mail: santa@antarctic.nn

#[CURRENT ADDRESS SPACE USAGE TEMPLATE]#

			Addresses Used			
Prefix	Subnet Mask	Size	Current	1-yr	2-yr	Description
193.1.193.0	255.255.255.192	64	28	34	60	Candy Cane Dept.
193.1.193.64	255.255.255.224	32	10	21	28	Toy Design
193.1.193.96	255.255.255.224	32	8	13	27	Toy Manufacture
193.1.193.128		128				Unused
193.1.194.0	255.255.254	512	317	429	480	Reindeer Training
193.1.196.0	255.255.255	256	132	200	230	Naughty or Nice
		1024	495	697	825	Totals

II. The Request

#[REQUEST OVERVIEW TEMPLATE]#

request-size: 256
addresses-immediate: 120
addresses-year-1: 171
addresses-year-2: 202
subnets-immediate: 6
subnets-year-1: 7
subnets-year-2: 7
inet-connect: Already connected through Antarctic
country-net: NN
private-considered: yes
request-refused: yes - North Pole Inet refused us service because we believe reindeer can fly.
PI-requested: no
addresses-returned: 192.0.2.0 - 192.0.2.256 to Antarctic Inet on 960623

#[ADDRESSING PLAN]#

Relative Prefix#	Subnet Mask	Size	Addresses Used Immediate	1yr	2yr	Description
0.0.0.0	255.255.255.128	128	80	95	100	Toy Design
0.0.0.128	255.255.255.224	32	12	17	25	Toy Manufacture
0.0.0.160	255.255.255.224	32	0	15	28	Elf Personnel
0.0.0.192	255.255.255.240	16	7	8	10	Naughty or Nice North
0.0.0.208	255.255.255.240	16	10	14	14	Naughty or Nice South
0.0.0.224	255.255.255.240	16	10	12	12	Naughty or Nice East
0.0.0.240	255.255.255.240	16	8	10	13	Naughty or Nice West
		256	120	171	202	Totals

III. Database Information

#[NETWORK TEMPLATE]#

inetnum: x.x.x.x/24
netname: XMAS
descr: Santa's Workshop Inc.
descr: Christmas Toys Manufacturing Facility
descr: Northern Nowhere
country: NN
admin-c: SC12-RIPE
tech-c: RR212-RIPE
status: ASSIGNED PA
notify: jbgood@antarctic.nn
mnt-by: SANTA-SECURITY
changed: jbgood@antarctic.nn 960412
source: RIPE

#[PERSON TEMPLATE]#

person: Santa A Claus
address: Santa's Workshop Inc.
address: Jingle Bell Lane 12
address: 1224CH Christmastown
address: Northern Nowhere
phone: +12 12 122 1122
phone: +12 12 122 2211 ext. 1221
fax-no: +12 12 122 121
e-mail: santa@xmas.nn
nic-hdl: SC12-RIPE
notify: jbgood@antarctic.nn
mnt-by: SANTA-SECURITY
changed: jbgood@antarctic.nn 960412
source: RIPE

#[PERSON TEMPLATE]#

person: Rudolf R N Reindeer
address: Santa's Workshop Inc.
address: Jingle Bell Lane 21
address: 1224CH Christmastown
address: Northern Nowhere
phone: +12 12 122 1111
fax-no: +12 12 122 2222
e-mail: Rudolf@xmas.nn
nic-hdl: RD212-RIPE
notify: jbgood@antarctic.nn
mnt-by: SANTA-SECURITY
changed: jbgood@antarctic.nn 960412
source: RIPE

#[TEMPLATES END]#