Supporting Notes For Provider Aggregatable (PA) Assignment Request Form

RIPE NCC

Document ID: ripe-584 Updates: ripe-489 Date: March 2013

This document contains instructions for LIRs on how to complete the "<u>Provider Aggregatable (PA)</u> <u>Assignment Request Form</u>".

The instructions are based on the "IPv4 Address Allocation and Assignment Policy for the RIPE region".

LIRs should send separate "Provider Aggregatable (PA) Assignment Request" forms for each End User.

- General Information
- Address Space User
- Addressing Plan
- Equipment Description
- Network Description
- Network Diagram
- End of Request

General Information

```
#[GENERAL INFORMATION]#

%
% Please add your RegID.
%
% request-type: pa-ipv4
form-version: 1.3
x-ncc-regid: nl.bluelight
```

Please do not change the value of the "request-type:" and "form-version:" fields.

Enter your Registry Identifier (RegID) in the "x-ncc-regid:" field. RegIDs have the following format: <country code>.<name>. If you do not know your RegID, please contact <ncc@ripe.net>.

Address Space User

```
#[ADDRESS SPACE USER]#

%

% Who will use the requested address space?

%
```

```
% legal-organisation-name: North SantaBank
organisation-location: Santa City, NN
website-if-available: http://www.nsb.nn
%
% Does this End User already have address space that can be
% used for this assignment? (Yes/No)
%
% space-available: No
```

Enter the legal name and primary location of the organisation that will use this address space in the "legal-organisation-name:" and "organisation-location:" fields. If this End User has a website, enter the URL in the "website-if-available:" field. Otherwise, enter "none" in this field.

If there is any address space assigned to this End User that is not in use, indicate this in the "space-available:" field. If you answer "yes", you can explain why the End User needs another assignment of address space in the "Network Description" section at the end of this form.

Addressing Plan

| #[ADDRESSING PLAN]# | | | | | |
|---|------------|-------------|--------------|--------|---------------------|
| % How will the End User use this address space? | | | | | |
| % | | | | | |
| % | Subnet | Immediate | Intermediate | Entire | Purpose |
| % | size (/nn) | Requirement | Requirement | Period | |
| | | | | | |
| subnet: | /26 | 32 | 64 | 64 | Employee VPN Access |
| subnet: | /26 | 18 | 34 | 64 | Financial Services |
| subnet: | /26 | 22 | 30 | 60 | Workstations |
| subnet: | /27 | 11 | 15 | 28 | Public Services |
| subnet: | /27 | 7 | 18 | 30 | Operations |
| subnet: | /24 | 176 | 192 | 240 | Branch Offices |
| totals: | /23 | 266 | 353 | 486 | |
| | | | | | |
| number-of-subnets: 6 | | | | | |
| % Will the End User return any address space? | | | | | |
| | | | | | |
| address-space-returned: 85.118.187/24 to nl.bluelight in 3 months | | | | | |

The addressing plan shows how the End User will use the requested address space. You can repeat the "subnet" row as many times as needed. Delete any empty "subnet" fields before you send the request. In the "Subnet size (/nn)" column, enter a slash notation prefix for each subnet. Each entry should be large enough to contain the number of addresses needed for that subnet over the next time period.

In order to demonstrate the predicted growth of your network, you must provide an estimate of the address space you will require over three distinct periods: Immediate, Intermediate and the Entire period. Your estimates should include interfaces used for hosts, routers, gateways, terminal concentrators and any other machines requiring one or more network interfaces. These columns can either contain numbers (for example, 128) or slash notation prefixes (for example, /25). Multiple slash notation prefixes must be separated by comma(s) with no blank spaces (for example, /25,/27).

Assignments' immediate utilisation should be at least 25% of the assigned space. After one year, this should be at least 50% of the space unless special circumstances are defined.

In the "Purpose" column, write a short description of each subnet. If needed, you can write a more detailed description in the "Network Description" section at the end of this form.

In the "totals" row, add the total of each column. The total of the "Subnet size (/nn)" column should be the total amount of address space you are requesting for this assignment.

In the "number-of-subnets:" field, enter the total number of subnets listed in the addressing plan.

The "netname:" should be a short, descriptive name for the network and should reflect the End User's organisation name. You should use the same "netname:" when you register this assignment in the RIPE Whois Database.

If there is any address space assigned to the End User that they will return, list each prefix in separate "address-space-returned:" fields. The expected time for renumbering is three months. You can use the following syntax: <x.x.x.x/xx> to <which LIR/ISP> in <time period> for this field.

Equipment Description

#[EQUIPMENT DESCRIPTION]#

%

% What equipment will be used and how will it use the

% requested address space?

equipment-name: Core switches

manufacturer-name: Cisco
model-number: 25xx
other-data: 3 units
equipment-name: Servers

manufacturer-name: HP

model-number: various
other-data: 40 units
equipment-name: Firewalls
manufacturer-name: Cisco
model-number: PIX 515 E

other-data: 2 units, 8 IP addresses

equipment-name: Workstations

manufacturer-name: **Dell** model-number: **GX150**

other-data: 22 units, 1 IP address each

equipment-name: Routers
manufacturer-name: Cisco
model-number: 3825
other-data: 2 units
equipment-name: Routers
manufacturer-name: Cisco
model-number: AS5300

other-data: 1 unit, 32 ports

The equipment description will help us (RIPE NCC) to understand the requirements listed in the addressing plan and can be repeated as many times as needed. Leave an empty line before each new "equipment-name:" field.

In the "equipment-name:" field, enter the type of equipment requiring address space from this assignment.

Enter the vendor name and model number for the piece of equipment in the "manufacturer-name:" and "model-number:" fields.

If you have any more information about how this piece of equipment will use the requested address space, add this in the "other-data:" field.

Network Description

```
#[NETWORK DESCRIPTION]#

%

% Please add more information if you think it will help us

% understand this request.

We have 11 branches across Santa City linked by corporate fibre channels.

We will assign a /28 subnet for each branch.

Each branch will have SMTP, WWW, file server, e-banking and dial-up pool.

Public Internet Services: SMTP (2 IP addresses),

WWW (6 IP addresses, 2 servers), FTP (1 IP address), DNS (2 IP addresses)

Financial Services: 6 servers, 3 IP addresses each.

Operations network: Security, Monitoring, VPN, Proxy, DNS
```

You can use this space for additional information that you think will be helpful for us when we evaluate your request. A clearer understanding of the network and its addressing needs can help us to evaluate your request more quickly.

Network Diagram

```
#[NETWORK DIAGRAM]#

%

% Have you attached a network diagram to this request? (Yes/No)

diagram-attached: Yes
```

A network diagram (topology map) can help us to understand the set-up of the network and its addressing needs.

End of Request

```
#[END of REQUEST]#

Best Regards,

Jan Janssen, Bluelight Admin
```

Please write your full name below the "#[END of REQUEST]#" header.