# Supporting Notes for the Autonomous System (AS) Number Request Form

Filiz Yilmaz, Emma Bretherick, Laura Cobley, Alex Le Heux

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### Introduction

This document contains instructions for completing the 'Autonomous System (AS) Number Request Form'. It is a tool for gathering the information necessary to evaluate the request and to ensure that the same guidelines are applied to each request. Where necessary, the RIPE NCC will ask for additional information.

The 'Autonomous System (AS) Number Request Form' can be found at: <u>http://www.ripe.net/ripe/docs/asnrequestform.html</u>

Please read all the information below carefully before submitting your application for an AS Number. For more detailed explanations on routing policy objects, please refer to "Routing Policy Specification Language (RPSL)" (RFC 2622). For an explanation on when an AS Number is needed, please see: "Guidelines for Creation, Selection and Registration of an Autonomous System" (RFC 1930). For Autonomous System Number policies, please refer to the RIPE document "European Internet Registry Policies and Procedures" found at:

http://www.ripe.net/ripe/docs/ir-policies-procedures.html

When sending the completed AS Number request form to the RIPE NCC, all information requested in the form must be supplied, including the technical routing policy.

#### Supporting Notes for the Request Form Templates

```
#[GENERAL INFORMATION]#
request-type: as-number
form-version: 1.1
```

Please do not alter the value of the 'request-type' and 'form-version' fields.

x-ncc-regid:

The Registry Identifier (RegID) must be included in every message sent to <hostmaster@ripe.net>. It is used to identify the Local Internet Registry (LIR). It has the following format:

<country code>.<organisation name>

Warning: Requests sent to the RIPE NCC that lack a proper RegID (x-ncc-regid) will bounce back to the sender.

```
#[AS NUMBER USER]#
%
% Who will use the AS Number being requested?
legal-organisation-name:
website-if-available:
```

In the 'legal-organisation-name' field please enter the registered/legal name of the organisation for whom the AS Number is being requested.

In the 'website-if-available' field please enter the URL of the organisations website if available.

#[ADDRESS SPACE TO BE ANNOUNCED]#
%
% Please list the address prefixes that will originate from
% the new AS Number. Please specify each prefix in a
% separate "prefix" field below.

prefix:

Please specify the address space using the CIDR (slash) notation (i.e. x.x.x/xx).

% If the organisation wishing to be multi-homed does not

```
% have address space yet but has a pending request sent to
```

% <hostmaster@ripe.net>, please include the ticket number

```
% of the request below.
```

pending-ticket-ID:

To process this request you must complete either the 'prefix' field or the 'pending-ticket-ID' field.

```
#[PEERING CONTACTS]#
%
% Please list the e-mail contact addresses of peering
% partners for the requested AS Number.
peering:
peering:
```

Please list all your peering partners here. The minimum number of peers that may be given is two to ensure that the organisation will be multihomed. If you have more than two peers, please add these to the list using the same format (i.e. 'peering').

```
#[DATABASE TEMPLATE(S)]#
%
% Please include database template(s) here so that the
% Hostmaster can register the assignment in the RIPE
% Database. If it is necessary to create a maintainer object
% please include that template too.
%
% Please also note that although "import:" and "export:"
% attributes for an "aut-num" object are optional in terms
% of database software, they are mandatory in terms of RIPE
% policies. This ensures that the AS Number requested is to
% be multi-homed.
aut-num: ASNEW
as-name: [mandatory] [single] [ ]
descr: [mandatory] [multiple] [ ]
import: [optional] [multiple] [ ]
org: [optional] [multiple] [ ]
org: [optional] [single] [ inverse key]
admin-c: [mandatory] [multiple] [ inverse key]
tech-c: [mandatory] [multiple] [ inverse key]
mnt-routes: [optional] [multiple] [ inverse key]
mnt-routes: [optional] [multiple] [ inverse key]
changed: hostmaster@ripe.net
source: RIPE
```

The "aut-num:" attributes described below are a minimal set sufficient to register most common situations. Please consult RFC 2622 for full details on the syntax of these and other attributes. More information can also be found in the RIPE Database Reference Manual at:

http://www.ripe.net/ripe/docs/databaseref-manual.html

The "aut-num:" attribute should be completed with ASNEW. The RIPE NCC will assign an AS Number after evaluation of this request.

The "as-name:" attribute is a descriptive name associated with the AS. It is recommended to use an as-name that relates to the organisation for which the AS Number is being requested. Valid characters are letters, numbers and dash. It cannot start with the prefix "AS".

For example: as-name: NAME-OF-ORGANISATION-AS

The "descr:" attribute is a short description of the Autonomous System, including the name of the organisation using the AS Number.

The "import:" attribute is to specify policy for the routes that you accept from your peer. Syntax: from <peering-1> [action <action-1>] accept <filter>

For example: import: from AS2 accept ANY

The action specification is optional. Please refer to RFC 2622 for more detailed information.

The "export:" attribute is to specify policy for the route announcements that you send to your peer.

Syntax: to <peering-1> [action <action-1>] announce <filter>

For example: export: to AS2 announce ASNEW

The action specification is optional. Please refer to RFC 2622 for more detailed information.

The "org:" attribute should specify the Org ID for the organisation that will use the address space. This object must be created in advance.

The "admin-c:" attribute contains the nic-hdl for the administrative contact person at the LIR. This person should be administratively responsible for the network. A role object nic-hdl can also be used in this attribute.

The "tech-c:" attribute contains the nic-hdl for the technical contact person at the LIR. This person should have technical knowledge of the network and will preferably be working onsite. A role object nic-hdl can also be used in this attribute.

The "mnt-routes:" attribute provides hierarchical authentication. It authenticates the creation of route objects that use this AS Number in the "origin" attribute.

The "mnt-by:" attribute specifies the name of the maintainer protecting this object.

The "changed:" attribute must be hostmaster@ripe.net.

The "source:" attribute must be RIPE.

If the maintainer referenced does not exist in the RIPE Database please include the **mntner** template below the **aut-num** template. Please leave a blank line between the templates.

```
#[INSERT SUPPLEMENTAL COMMENTS]#
%
% Please add any supplementary information that you think
% may facilitate the evaluation of this request below.
```

You may use this area/space for any additional comments you feel are important and did not fit within the previous templates.

```
% If you require a 16-bit AS Number instead of a 32-bit AS Number,
% please indicate this below and tell us why. For more information,
% see <u>http://www.ripe.net/news/asn-32-guide.html</u>
AS Number Type: 32-bit
Why 16-bit:
```

As of 1 January 2009, all AS Numbers assigned by the RIPE NCC will be 32-bit by default. If you require a 16-bit AS Number change the default entry "32-bit" to "16-bit" and explain why you require a 16-bit AS Number. If you require further clarification, please see:

http://www.ripe.net/news/asn-32-guide.html

```
#[END OF REQUEST]#
```

Please insert your signature in plain text (with your full name) after the above header. The Robot will not process any information included here.

#### Example

#[GENERAL INFORMATION]#

```
request-type: as-number
form-version: 1.1
x-ncc-regid: nn.santa
```

#[AS NUMBER USER]# % Who will use the AS Number being requested? legal-organisation-name: Santa's Workshop Inc. website-if-available: www.xmas.nn #[ADDRESS SPACE TO BE ANNOUNCED]# % Please list the address prefixes that will originate from % the new AS Number. Please specify each prefix in a % separate "prefix" field below. prefix: 192.168.28.0/24 % % If the organisation wishing to be multi-homed does not % have address space yet but has a pending request sent to % <hostmaster@ripe.net>, please include the ticket number % of the request below. pending-ticket-ID: #[PEERING CONTACTS]# % Please list the e-mail contact addresses of peering % partners for the requested AS Number. peering: role@northernnowhere.nn peering: admin@polarcity.nn #[DATABASE TEMPLATE(S)]# % Please include database template(s) here so that the % Hostmaster can register the assignment in the RIPE % Database. If it is necessary to create a maintainer object % please include that template too. 2 % Please also note that although "import:" and "export:" % attributes for an "aut-num" object are optional in terms % of database software, they are mandatory in terms of RIPE % policies. This ensures that the AS Number requested is to % be multi-homed.

aut-num: ASNEW as-name: SANTA-AS

descr:	Santa's Workshop Inc.
import:	<pre>from AS3333 action pref=100; accept ANY</pre>
export:	to AS3333 announce ASNEW
import:	from AS2121 action pref=50; accept ANY
export:	to AS2121 announce ASNEW
org:	ORG-SANT1-RIPE
admin-c:	HOHO15-RIPE
tech-c:	HOHO15-RIPE
mnt-routes:	SANTA-MNT
mnt-by:	SANTA-MNT
changed:	hostmaster@ripe.net
source:	RIPE

#[INSERT SUPPLEMENTAL COMMENTS]#
%
% Please add any supplementary information that you think
% may facilitate the evaluation of this request below.

We have agreed with our peers to establish the multi-homed connections within two months of receiving an AS Number.

% If you require a 16-bit AS Number instead of a 32-bit, % please indicate so and tell us why. For more information, % see <u>http://www.ripe.net/news/asn-32-guide.html</u>

AS Number Type: 32-bit

Why 16-bit:

#[END of REQUEST]#

Best Regards, Santa Claus

Network Administrator Santa's Workshop Inc.

## References

Further useful information can be found at the following links:

Autonomous System (AS) Number Assignment Policies and Procedures <u>http://www.ripe.net/ripe/docs/asn-assignment.html</u>

RIPE Database User Manual: Getting Started <a href="http://www.ripe.net/ripe/docs/db-start.html">http://www.ripe.net/ripe/docs/db-start.html</a>

RFC2622 Routing Policy Specification Language (RPSL) <u>ftp://ftp.rfc-editor.org/in-notes/rfc2622.txt</u>

RIPE NCC LIR Portal <u>https://lirportal.ripe.net/</u>