RIPE Document Store

European Autonomous System Number Application Form and Supporting Notes

P. Caslav, M. Kuehne

Document ID: ripe-147
Obsoletes: ripe-109
See also:
ripe-140

ripe-181

Table of Contents

Part I: The AS Number Application Form

This section contains the set of templates to be used when submitting an Autonomous System Number request. This form must be used by Internet Service Providers when submitting a request to the RIPE NCC. Instructions for filling out the templates are found in Part II.

Internet Service Providers: Submit the form via e-mail to **`<hostmaster@ripe.net>`** as an ASCII text document. (If the ISP is not a Local Internet Registry , the form should be submitted to the upstream provider.) The form must include the Registry's Identifier (X-NCC-RegID) in the e-mail header or at the top of the form.

Autonomous System Administrators: Send the form your Internet Service Provider.

- **Warning** (If submitted to the RIPE NCC): Requests that are sent to the RIPE NCC which lack a proper Registry Identifier (X-NCC-RegID) will be returned to the sender. Further, any modifications to the templates or missing templates may result in a delay in handling.

X-NCC-RegID:

Does the organisation requesting the AS number have address space that will be originated from the new AS? Please list the prefixes here:

If the organisation does not have address space yet, but has a pending request with RIPE NCC hostmasters, please include the ticket number of the request here:

#[AUT-NUM TEMPLATE]#

aut-num:
descr:
descr:
as-in:
as-in:
as-out:
as-out:
default:
admin-c:
tech-c:
remarks:
mnt-by:
changed:
source: RIPE

#[MAINTAINER TEMPLATE]#

mntner :
descr:
admin-c:
tech-c:
upd-to:
auth:
mnt-by:
changed:
source: RIPE

#[PERSON TEMPLATE]#

person:
address:
address:
phone:
fax-no:
e-mail:
nic-hdl:
remarks:
notify:
changed:
source: RIPE

#[TEMPLATE END]#

Part II: Supporting Notes for the AS Number Application Form

This section provides supporting notes to the Autonomous System Application Form. Please ensure that you 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 "Representation of IP Routing Policies in a Routing Registry" (ripe-181). For an explanation on when an AS Number is needed and policies and procedures to be followed when requesting an AS Number please see "Guidelines for creation, selection and registration of an Autonomous System" (RFC 1930), as well as section 7 of "European Internet Registry Policies and Procedures" (ripe-140).

When sending the completed ripe-147 form to the RIPE NCC, all information requested in the form must be supplied, including the technical routing policy. In some cases, the RIPE NCC will request additional information. When sending the request, please only send the form, not this entire document.

Administrative and Technical Information

Current assignment guidelines only allow the RIPE NCC to assign AS Numbers to multihomed organisations which need to define their own routing policy. To evaluate the request in this regard, the enterprise will have to provide information on who they will be peering with by specifying a routing policy in the as-in and as-out attributes. The enterprise will also have to provide information about which IP addresses they will be routing (originating) with this AS.

The "aut-num:" attributes described below are a minimal set sufficient to register most common situations. Please consult "Representation of IP Routing Policies in a Routing Registry" (RIPE-181) in the RIPE document store for full details on the syntax of these and other attributes.

NOTE: All database objects (such as " mntner :", "as-macro:" or "community:" objects) referenced in the aut-num template should be entered into the database before submitting the request or included on the application form.

```
Aut-num Template Fields
-------------------------------------------------------
aut-num:    Specifies  the temporary name of the AS to
            be assigned. This name is  usually  needed
            for  the  as-out  expression  below. It is
            suggested to use NEW. In case multiple AS-
            es  are  required,  NEW1, NEW2, etc can be
            used.
descr:      A short description of the Autonomous Sys-
            tem,  including  the  location;  The  full
            postal address is not needed  as  this  is
            provided  in  the person template (see be-
            low).
as-in:      Description of accepted  routing  informa-
            tion between AS peers. Format: "from <aut-
            num> <cost> accept <routing policy expres-
            sion>"
            Explanation:  <aut-num>  refers to your AS
            neighbor. <cost> is a positive number used
            to  express  a  relative  cost  of  routes
            learned. The lower the cost the more  pre-
            ferred  the route. <routing policy expres-
            sion> can take the  following  formats:  A
            list  of  one or more ASes, s, Communities
            or Route Lists, or the keyword "ANY".  The
            boolean  keyword  operators "AND", "OR" or
            "NOT" can be used with the  above  expres-
            sions.  This  field is mandatory, multiple
            lines are possible.
as-out:     A description of generated routing  infor-
            mation  sent  to  other  AS peers. Format:
            "<aut-num> announce  <routing  policy  ex-
            pression>"
            Explanation:  <aut-num>  refers to your AS
            neighbour. <routing policy expression>  is
            explained  in the "as-in:" attribute defi-
            nition above. To  express  the  Autonomous
            System Number that one is applying for, it
            is possible to use NEW as explained above.
            This  field  is  mandatory, multiple lines
            are possible.
default:    Description  of  default  routes.  Format:
```

"<aut-num> <cost>"
Explanation: <aut-num> refers to your AS neighbour. <cost> is a positive number used to express a relative cost of default routes used. The lower the cost the more preferred the route. This field is optional.

admin-c: The NIC handle of the person who is the administrative contact for the Autonomous System; The administrative contact must be physically located at the site that will be using the AS Number. More than one contact can be specified by adding more "admin-c" fields. An explanation on how to obtain a NIC handle can be found in ripe-142. This field is mandatory.

tech-c: The NIC handle of the technical contact person; There can be more than one name specified in multiple fields for this template. This field is mandatory.

remarks: Remarks or comments, to be used for clarification. This field is optional.

mnt-by: References a registered maintainer object, which specifies authorisation checks on changes to the "aut-num:" object in the database. If you want to use the AS Number as part of the maintainer name, just put "NEW" in this space and the RIPE NCC hostmaster will fill in the number. More information on the database maintainer object can be found in ripe-120. This field is mandatory.

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. This field is mandatory.

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

#[AUT-NUM TEMPLATE]#

aut-num: *NEW*
descr: *NIKHEF-H Autonomous System*
descr: *Science Park Watergraafsmeer*
descr: *Amsterdam*
as-in: *from AS123 100 accept ANY*
as-in: *from AS7432 100 accept AS7432 AND AS1000*
as-in: *from AS1000 10 accept AS-EBONE*
as-in: *from AS3333 100 accept {195.87.45.0/16, 128.141.0.0/16}*
as-out: *to AS123 announce NEW*
as-out: *to AS7432 announce NEW*
as-out: *to AS1000 announce NEW*
as-out: *to AS3333 announce NEW*
default: *AS123 100*
admin-c: *PC111-RIPE*
tech-c: *EW21-RIPE*
mnt-by: *NEW-MNT*
changed: *hostmaster@ripe.net 960919*

source: *RIPE*

Maintainer Information

It is required for each "aut-num:" (autonomous number) object to reference a " mntner :" (maintainer) object. If the maintainer information is already in the database, then the person handling the request should check to see if it is up to date. If there is no database entry , one should now be created by using the following template. Since the maintainer object is described in detail elsewhere (ripe-120) only an example is included here.

#[MAINTAINER TEMPLATE]#

mntner: *NEW-MNT*
descr: *NIKHEF-H AS Maintainer*
tech-c: *PC111-RIPE*
admin-c: *EW21-RIPE*
upd-to: *hostmaster@ripe.net*
auth: *CRYPT-PW peEw8Gb4xBNqI*
mnt-by: *NEW-MNT*
changed: *hostmaster@ripe.net 960919*
source: *RIPE*

Contact Information

Each "aut-num:" and " mntner :" object references contact persons, which also need to be entered in the RIPE database. If the contact information is already in the database, then the person handling the request should check to see if it is up to date. If there is no database entry, one should now be created by using the following template. Since the person object is described in detail elsewhere, (ripe-119 and ripe-142) only an example is given here.

#[PERSON TEMPLATE]#

person: *Paula Caslav*
address: *RIPE Network Coordination Centre (NCC)*
address: *Kruislaan 409*
address: *NL-1098 SJ Amsterdam*
address: *Netherlands*
phone: *+31 20 592 5065*
fax-no: *+31 20 592 5090*
e-mail: *paula@ripe.net*
nic-hdl: *PC111-RIPE*
notify: *paula@ripe.net*
changed: *paula@ripe.net 960731*
source: *RIPE*