

How to Update a Delegation in the ENUM (e164.arpa) Domain

Introduction

If you require a new ENUM delegation, please follow [the instructions on our website](#).

Delegations for countries within the e164.arpa zone are controlled by the contents ("nserver:" attributes) of domain objects within the RIPE Database. In order to make changes to delegations you must update these domain objects.

Example ENUM Domain Object:

```
domain: 1.3.e164.arpa
descr: Stichting ENUM Nederland
org: ORG-SEN3-RIPE
admin-c: MD6066-RIPE
tech-c: ENT6-RIPE
zone-c: ENT6-RIPE
nserver: ns1.enum.nl
nserver: ns7.domain-registry.nl
mnt-by: ENUM-NL-MNT
source: RIPE # Filtered
```

The Three Steps to Updating an ENUM Delegation

Step 1: Setup your servers to answer for the zone.

Ensure that the dns servers you are changing the delegation to are configured and answering correctly for the zone. Some automated checks are done when the change is made to ensure the change of delegation does not break the functionality.

Step 2: Submitting the **domain** object

Once you have set up your server(s) to serve the ENUM zones you are ready to request delegation by submitting a **domain** object:

1. By using webupdates

- First authorise yourself in the authorisation section. Then go to the add section
- Select domain, by clicking on 'Create a New Object' and then click on 'Add Object'
- Fill in all the available fields
- Use the 'Add New Field' feature to add at least two "nserver:" attributes. Here, you supply the names of the name servers that are serving the zones as set up in Step 3 and that you have specified in the NS resource records of those zones
- For the "mnt-by:" attribute use the **mntner** you prepared in Step 1

2: By email

You need to create a **domain** object containing information about the zone you need reverse delegation for. For details on creation and authorisation please refer to the RIPE Database Reference Manuals.

These are the basic steps:

Obtain a template using **whois -t domain** and fill in the details.

```
domain:      [mandatory] [single] [primary/look-up key]
```

❶

```
descr:      [mandatory] [multiple] [ ]
admin-c:    [mandatory] [multiple] [inverse key]
tech-c:     [mandatory] [multiple] [inverse key]
zone-c:     [mandatory] [multiple] [inverse key]
nserver:    [optional]  [multiple] [inverse key]
```

❷

```
sub-dom:    [optional] [multiple] [inverse key]
dom-net:    [opt
```

❶	Here you put the name of your domain.
❷	Enter the names of your name servers which correspond to the name servers as used in Step 3 ; use multiple lines, one nserver: nameservername per line. Do not forget to include ns.ripe.net if you request reverse delegation for a IPv4/16 domain. Do not include ns.ripe.net in other cases.
❸	For the "mnt-by:" attribute you use the mntner you have prepared in Step 1

```
Optional] [multiple] [ ]
remarks:  [optional] [multiple] [ ]
notify:   [optional] [multiple] [inverse key]
```

❸

```
mnt-by:    [optional] [multiple] [inverse key]
mnt-lower: [optional] [multiple] [inverse key]
refer:     [optional] [single] [ ]
changed:   [mandatory] [multiple] [ ]
source:    [mandatory] [single] [ ]
```

Send your **domain** object to auto-dbm@ripe.net.

Step 3: Verifying the setup

Once you have submitted the **domain** object you will receive a notification from the database. You should then be able to query for your object in the database (e.g **whois -h whois.ripe.net 1.3.e164.arpa**). After the object appears in the database it may take between 15 to 60 minutes before the delegation information is available in the DNS. The ultimate test is to query a recursive name server that is not authoritative for your zone for a record from your zone.

Refer to [Using dig to Troubleshoot Your Set-Up](#) for more information.

Please contact ripe-dbm@ripe.net if, six hours after the appearance of your **domain** object in the database, your delegation does not appear. Include the details such as name server addresses and the **domain** object in your request. Also include the full response, including headers, as received from the database.

Using DNSSEC With Your ENUM Delegation.

It is possible to secure your ENUM zone delegation with DNSSEC. You will first need to make sure you have correctly configured your name server and signed your zone. Please refer to [this howto](#) for more detailed information about DNSSEC.

To upload your DS record to the ENUM parent zone (e164.arpa) it is possible to add an attribute to your domain object called "ds-rdata".

Example domain object with a DNSSEC DS record:

```
domain: 1.3.e164.arpa
descr: Stichting ENUM Nederland
org: ORG-SEN3-RIPE
admin-c: MD6066-RIPE
tech-c: ENT6-RIPE
zone-c: ENT6-RIPE
nserver: ns1.enum.nl
nserver: ns7.domain-registry.nl
mnt-by: ENUM-NL-MNT
source: RIPE # Filtered
ds-rdata: 42307 5 1 e7c5e507b99fb865065100ea7f4ce7a957fbdaa1
```

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