Draft Request Form for Delegation of a Zone Under e164.arpa

RIPE NCC

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Table of Contents

Introduction

- 1. Technical Requirements for Setting up the Zone
- 2. Database Information
- 3. Submission of Request
- 4. References
- 5. ENUM Information Resources

Appendix

Introduction

RFC 3761 [1] defines **e164.arpa** as the domain from which DNS delegations of E.164 country codes are made. The Internet Architecture Board (IAB) has delegated the task of running DNS operations for that zone to the RIPE NCC.

The instructions from the IAB to the RIPE NCC can be found at:

http://www.iab.org/documents/docs/sg2-liaison-e164-sep-02.html

The RIPE NCC has committed to follow these instructions.

The RIPE NCC will send announcements to the <enum-announce@ripe.net> mailing list. This is a public mailing list.

All information, including archives of correspondence, can be found at:

http://www.ripe.net/enum/

Questions for the RIPE NCC regarding ENUM should be addressed to <enum-request@ripe.net>.

Contact with the International Telecommunication Union, Telecommunication Standardization Sector, Telecommunication Standardization Bureau (ITU-T TSB) should be with the address <richard.hill@itu.int>.

By completing and submitting the ENUM Request Form, the requester acknowledges, understands and accepts the following:

- The RIPE NCC only operates this service under the instructions by the IAB;
- All decisions regarding delegations are made by the ITU and are neither the responsibility of the RIPE NCC nor of the IAB.

1.Technical Requestments for Setting up the Zone

The RIPE NCC will only evaluate the technical set-up of the zone once the ITU has decided that the zone should be delegated.

Anyone setting up a zone needs to be familiar with RFC 1912 [2]. Zones under **e164.arpa** need to comply with RFC 1912 [2].

Prior to delegation, both primary and secondary nameservers should be configured and answering queries for the zone.

2. Database Information

Please complete the following database templates. Once the delegation is granted, these objects will be registered in the RIPE Whois Database.

An example of the completed database templates is presented in the appendix to this document.

For more information about the RIPE Whois Database, please refer to the "RIPE Database User Manual: Getting Started" [3].

Documentation about how to complete the database templates can be found at:

http://www.ripe.net/perl/whois?-v+domain (for the **domain** object)

<u>http://www.ripe.net/perl/whois?-v+person</u> (for the **person** object)

http://www.ripe.net/perl/whois?-v+role (for the **role** object)

http://www.ripe.net/perl/whois?-v+mntner (for the **mntner** object)

2.1. Domain Object

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

```
descr:
              [mandatory] [multiple]
              [optional]
ora:
                         [multiple] [inverse key]
             [mandatory] [multiple] [inverse key]
admin-c:
tech-c:
             [mandatory] [multiple] [inverse key]
zone-c:
             [mandatory] [multiple] [inverse key]
             [optional]
                         [multiple] [inverse key]
nserver:
             [optional]
                         [multiple] [inverse key]
sub-dom:
dom-net:
             [optional]
                          [multiple] [ ]
             [optional]
                          [multiple] [ ]
remarks:
             [optional]
                          [multiple] [inverse key]
notify:
mnt-by:
             [optional]
                          [multiple] [inverse key]
mnt-lower:
             [optional]
                          [multiple] [inverse key]
                                     [ ]
refer:
             [optional]
                          [single]
changed:
             [mandatory] [multiple] [ ]
source:
                                    [ ]
             [mandatory] [single]
```

Please note that although the maintainer attributes are optional, we strongly recommend using a maintainer to protect your **domain** object from unauthorised changes. Maintainers also protect against the unauthorised creation of objects representing sub-domains. See also 2.5. **Maintainer Object**.

2.2. Administrative Contact

The administrative contact is typically the person responsible for the administration of the respective zone under the e164.arpa domain.

```
person:
              [mandatory] [single]
                                      [lookup key]
              [mandatory] [multiple]
address:
                                      [ ]
              [mandatory] [multiple]
                                      [ ]
phone:
fax-no:
             [optional] [multiple]
                                     [ ]
e-mail:
                         [multiple] [lookup key]
             [optional]
             [optional] [multiple] [inverse key]
orq:
              [mandatory] [single]
nic-hdl:
                                      [primary/look-up key]
             [optional] [multiple] []
remarks:
notify:
             [optional]
                          [multiple] [inverse key]
             [optional]
                          [multiple] [inverse key]
mnt-by:
              [mandatory] [multiple] [ ]
changed:
              [mandatory] [single]
                                      [ ]
source:
```

2.3 Technical Contact

The technical contact is typically the person or people responsible for the technical operations of the respective zone under the e164.arpa domain. This contact can be in the same organisation as the administrative contact or an organisation that operates the zone on behalf of the administrative organisation.

```
person: [mandatory] [single] [lookup key]
address: [mandatory] [multiple] []
phone: [mandatory] [multiple] []
fax-no: [optional] [multiple] []
```

```
e-mail:
                [optional]
                              [multiple]
                                            [lookup key]
orq:
                [optional]
                              [multiple]
                                            [inverse kev]
nic-hdl:
                [mandatory]
                                            [primary/look-up key]
                              [single]
remarks:
                [optional]
                              [multiple]
                                            [ ]
notify:
                [optional]
                              [multiple]
                                           [inverse key]
mnt-by:
                [optional]
                              [multiple]
                                           [inverse key]
changed:
                [mandatory]
                              [multiple]
                                           [ ]
source:
                [mandatory]
                              [single]
                                           [ ]
or
role:
                [mandatory]
                              [single]
                                            [lookup key]
address:
                [mandatory]
                              [multiple]
                                            [ ]
phone:
                [optional]
                              [multiple]
                                           [ ]
                                           [ ]
fax-no:
                [optional]
                              [multiple]
e-mail:
                [mandatory]
                              [multiple]
                                            [lookup key]
trouble:
                [optional]
                              [multiple]
                                            [ ]
org:
                [optional]
                              [multiple]
                                           [inverse key]
admin-c:
                [mandatory]
                              [multiple]
                                           [inverse key]
tech-c:
                [mandatory]
                              [multiple]
                                           [inverse key]
nic-hdl:
                [mandatory]
                              [single]
                                            [primary/look-up key]
remarks:
                [optional]
                              [multiple]
                                            [ ]
notify:
                [optional]
                              [multiple]
                                           [inverse key]
mnt-by:
                [optional]
                              [multiple]
                                           [inverse key]
changed:
                [mandatory]
                              [multiple]
                                           [ ]
source:
                [mandatory]
                              [single]
                                           [ ]
```

2.4 Zone Contact

The zone contact is typically the person or people responsible for the DNS operations of the respective zone under the e164.arpa domain. This contact can be in the same organisation as the administrative contact or an organisation that operates the DNS on behalf of the administrative organisation.

```
[mandatory]
                              [single]
                                            [lookup key]
person:
address:
                [mandatory]
                              [multiple]
                                            [ ]
                                            [ ]
phone:
                [mandatory]
                              [multiple]
fax-no:
                [optional]
                              [multiple]
                                            [ ]
e-mail:
                [optional]
                              [multiple]
                                            [lookup key]
ora:
                [optional]
                              [multiple]
                                            [inverse key]
                [mandatory]
                                            [primary/look-up key]
nic-hdl:
                              [single]
remarks:
                [optional]
                              [multiple]
                                            [ ]
                                            [inverse key]
notify:
                [optional]
                              [multiple]
mnt-by:
                [optional]
                              [multiple]
                                            [inverse key]
                              [multiple]
changed:
                [mandatory]
                                            [ ]
source:
                [mandatory]
                              [single]
                                            [ ]
or
role:
                [mandatory]
                              [single]
                                            [lookup key]
address:
                [mandatory]
                              [multiple]
                                            [ ]
phone:
                [optional]
                              [multiple]
                                            [ ]
```

```
fax-no:
                 [optional]
                                    [multiple]
                                                   [ ]
e-mail:
                  [mandatory] [multiple] [lookup key]
trouble:
                 [optional] [multiple] [ ]
admin-c: [mandatory] [multiple] [inverse key]
tech-c: [mandatory] [multiple] [inverse key]
nic-hdl: [mandatory] [single] [primary/look-up key]
remarks: [optional] [multiple] [inverse key]
orq:
                 [optional] [multiple] [inverse key]
                 [optional] [multiple] [ ]
remarks:
                 [optional] [multiple] [inverse key] [optional] [multiple] [inverse key]
notify:
mnt-by:
changed:
                 [mandatory] [multiple] [ ]
source:
                   [mandatory] [single] [ ]
```

2.5. Maintainer Object

Database objects should be protected with a maintainer. The maintainer provides user configurable security for objects referencing it. It can help stop unauthorised changes to the database object representing the zone. The maintainer is referenced in the "mnt-by" and/or "mnt-lower" attributes of the **domain** object. It can also be referenced in "person:" and "role:" objects. The maintainer of database objects is the person or organisation responsible for creating, modifying or deleting these database objects. Multiple "mnt-by" or "mnt-lower" attributes can be included.

More information on maintainers and the security options available can be found at:

http://www.ripe.net/db/security.html

```
[mandatory] [single] [primary/look-up key]
mntner:
                 [mandatory] [multiple] []
descr:
                [optional] [multiple] [inverse key]
orq:
              [mandatory] [multiple] [inverse key]
[optional] [multiple] [inverse key]
admin-c:
tech-c:
upd-to: [mandatory] [multiple] [inverse key]
mnt-nfy: [optional] [multiple] [inverse key]
               [mandatory] [multiple] [inverse key]
auth:
remarks: [optional] [multiple] []
notify: [optional] [multiple] [inverse key]
notify: [optional] [multiple] [inverse key] mnt-by: [mandatory] [multiple] [inverse key]
referral-by: [mandatory] [single] [inverse key]
changed:
              [mandatory] [multiple] [ ]
                 [mandatory] [single]
                                             [ ]
source:
```

3. Submission of Request

Please submit the request to <enum-request@ripe.net>.

Please note that the submitted information and all communication related to your application will be publicly available at:

http://www.ripe.net/enum/

4. References

[1] P. Faltstrom, M. Mealling, "The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)", RFC 3761, April 2004.

[2] D. Barr, "Common DNS Operational and Configuration Errors", RFC 1912, February 1996.

[3] A. Robachevsky, S. Kerr, V. Manojlovic, S. Dickinson, "RIPE Database User Manual: Getting Started", ripe-253, September 2002.

5. ENUM Information Resources

Presentations on ENUM:

http://www.ripe.net/enum/presentations/

Appendix

An example of the completed database templates is presented here:

2.1. Domain Object

```
domain: 9.9.9.e164.arpa
```

descr: Northern Nowhere ENUM Mapping descr: Arctic Telecom ENUM Registry

admin-c: ARTE1-RIPE
tech-c: ARER1-RIPE
zone-c: OPER23-RIPE

nserver: iceberg1.arctic-telecom.net

nserver: titanic.penguin.org
nserver: snowflake.igloo.net
mnt-by: ARCTIC-SECURITY-MNT
mnt-lower: ARCTIC-SECURITY-MNT

changed: reco@arer.arctic-telecom.net 20040712

source: RIPE

2.2. Administrative Contact

role: Arctic Telecom
address: Frostlane 1-3

address: Building IV / Floor 7 address: 0135 NN Ice-Valley address: Northern Nowhere phone: +999 29 5775 100 fax-no: +999 29 5775 111

e-mail: arctel@arctic-telecom.net
trouble: admin@arctic-telecom.net

admin-c: CFR22-RIPE
tech-c: POBE15-RIPE
nic-hdl: ARTE1-RIPE

mnt-by: ARCTIC-SECURITY-MNT

changed: polar.bear@arctic-telecom.net 19990905 changed: polar.bear@arctic-telecom.net 20010711

source: RIPE

2.3. Technical Contact

role: Arctic Telecom ENUM Registry

address: Frostlane 1-3 address: Building III

address: 0135 NN Ice-Valley address: Northern Nowhere phone: +999 29 5777 100 fax-no: +999 29 5777 111

e-mail: artenum@arer.arctic-telecom.net

admin-c: ENRE24-RIPE tech-c: ENED233-RIPE tech-c: SNFL13-RIPE tech-c: OPER23-RIPE nic-hdl: ARER1-RIPE

mnt-by: ARCTIC-SECURITY-MNT

changed: snow.flake@arer.arctic-telecom.net

source: RIPE

2.4. Zone Contact

person: Regine Cold
address: Frostlane 1-3
address: Building III

address: 0135 NN Ice-Valley address: Northern Nowhere phone: +999 29 5777 359 fax-no: +999 29 5777 111

e-mail: reco@arer.arctic-telecom.net

nic-hdl: OPER23-RIPE

remarks: responsible for updates in 9.9.9.e164.enum

notify: reco@arer.arctic-telecom.net

mnt-by: ARCTIC-SECURITY-MNT

changed: reco@arer.arctic-telecom.net 20010223

source: RIPE

2.5. Maintainer Object

mntner: ARCTIC-SECURITY-MNT

descr: Arctic Telecom Maintainer

admin-c: CFR22-RIPE
tech-c: POBE15-RIPE

upd-to: admin@arctic-telecom.net
mnt-nfy: admin@arctic-telecom.net

auth: PGPKEY-40F7AECA
auth: PGPKEY-B20CD6A7

mnt-by: ARCTIC-SECURITY-MNT
referral-by: RIPE-DBM-MNT

changed: ripe-dbm@ripe.net 19990905

changed: polar.bear@arctic-telecom.net 20010202

source: RIPE