

# Provisioning ENUM DNS - user perspective

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# options – obtaining ENUM domains

- case #1: existing numbers, routed in the PSTN
  - go through your local ENUM trial/service
  - prove that you own that number
  - get a single number or a range (PBX pilot number) delegated – like a domain
  - operate your own gateway
- case #2 - dedicated new number space, NOT routed in PSTN
  - e.g join VisionNG association, obtain +87810 range
  - gatewaying not directly possible now (2 stage dialing)
  - a fast start – eventual „renumbering“ in the DNS is just a CNAME
- case #3: dedicated new number space, routed in PSTN
  - regulators might open up number spaces specifically for VoIP
    - or just extend the meaning of „mobile network“ to include IP
  - number assignment & ENUM delegation might become one stop-shop
  - who does the gateway ? How is portability achieved?

# what's different from domains

- normal domains – you decide
- the right in an ENUM domain trails the right-to-use in the number
  - existing numbers: you need to prove you own the number – initially & recurring
  - the right to use a phone != right in its number!!
  - new numbers: collapsing assignment and ENUM service becomes possible
- validation processes are in early stages
- +43 working assumptions:
  - paying the bill implies right-to-use
  - mobile: knowing your PIN code implies right-to-use

# sample portals

- the nic.at Tier2 ENUM portal
  - does single line & PBX extensions
  - available from <http://sourceforge.net/projects/enumreg/>
  - in action:  
[http://enum.nic.at/documents/AETP/Presentations/Austria/0018-2003-07\\_ENUM-Demo\\_ietf57-Provisioning\\_an\\_ENUM\\_entry\\_with\\_the\\_nic-at\\_portal.avi](http://enum.nic.at/documents/AETP/Presentations/Austria/0018-2003-07_ENUM-Demo_ietf57-Provisioning_an_ENUM_entry_with_the_nic-at_portal.avi)
- the Telekom Austria ENUM portal
  - single lines
  - does +43 and +87810 numbers
  - in action:  
[http://enum.nic.at/documents/AETP/Presentations/Austria/0019-2003-07\\_ENUM-Demo\\_ietf57-Provisioning\\_an\\_ENUM\\_entry\\_with\\_the\\_Telekom\\_Austria\\_portal.avi](http://enum.nic.at/documents/AETP/Presentations/Austria/0019-2003-07_ENUM-Demo_ietf57-Provisioning_an_ENUM_entry_with_the_Telekom_Austria_portal.avi)

# a working zone file

1.5.3.8.7.4.0.1.8.7.8.e164.arpa

```
IN SOA ns3ext.univie.ac.at. domain-admin.univie.ac.at.(
    2003082201 ; serial
    3600      ; refresh (1 hour)
    600      ; retry (10 minutes)
    604800   ; expire (1 week)
    36000    ; minimum (10 hours)
)
NS      ns.mah.priv.at.
NS      ns3ext.univie.ac.at.
NS      ns4ext.univie.ac.at.
```

\$ORIGIN 1.5.3.8.7.4.0.1.8.7.8.e164.arpa.

```
* NAPTR 100 10 "u" "E2U+sip" "!^\\+87810478351(.*)$!sip:4\\1@iptel.org!" .
```

```
* NAPTR 100 10 "u" "E2U+voice:sip" "!^\\+87810478351(.*)$!sip:4\\1@iptel.org!" .
```

```
1.1.7.4 NAPTR 100 10 "u" "E2U+sip" "!^.*$!sip:mah@nic.at43.at!" .
```



# checking that it works

```
samuel:~# host -t NAPTR 7.9.3.5.2.1.3.4.e164.arpa
```

```
7.9.3.5.2.1.3.4.e164.arpa NAPTR 100 10 "u"  
"E2U+email:mailto" "!^.*$!mailto:axelm@nic.at!" .
```

```
7.9.3.5.2.1.3.4.e164.arpa NAPTR 100 10 "u"  
"E2U+voice:sip" "!^.*$!lendl@sip.nic.at!" .
```

```
samuel:~#
```