

ENUM on its way to maturity

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ENUM, a convergence tool for translating telephone numbers into Internet addresses used by IP telephony and next generation mobile networks like UMTS, is a key ingredient for the transition to the Next Generation Networks.

ENUM introduces the revolutionary possibility to get the routing decision of telephone calls outside of the chassis of telephone switches and put it into the hands of end-users. Anyone using ENUM would be able to redirect personal or business phone calls to self-chosen Internet addresses in the form of e-mail addresses. ENUM provides a solution for number portability as well, because it is provider independent.

As with any revolution, the most difficult thing to change is mind-set. ENUM may be seen as a threat by some parts of the telecom industry, which sees large chunks of international traffic melting down into the new global network. It is perceived however as a new recursive revenue generator by start-ups flourishing across the world. Such start-ups are the new type of telephony companies, the "Voice over IP providers", which capitalize on the possibility of launching new services with small investments made possible by the rapid penetration of broadband Internet.

ENUM has had its long journey from Internet draft status (since 2000), through several national trials (like Austria, UK, Japan and others) and commercial test-beds. There are now signs that ENUM enters its deserved maturity.

RIPE (Réseaux IP Européens), the collaborative forum open to all parties interested in wide area IP networks and responsible for technical delegations under ENUM top level domain e164.arpa, has recently (at the RIPE48 meeting) transformed its activities on ENUM, that were conducted in various BoF sessions so far, into the more formal ENUM Working Group.

IETF, the protocol engineering and development arm of Internet society, has produced last week the final version of the documents describing ENUM (RFC 3761) and the way ENUM is used with SIP and H323 Voice over IP signaling protocols (RFC 3762 and RFC 3764).

Most importantly, both standardization bodies from Telecom (International Telecommunications Union's ITU-T Study Group 2) and Internet (IETF's ENUM Working Group) joined together the efforts lead by European Telecommunications Standards Institute (ETSI) to put ENUM platforms to the necessary interoperability tests that will make ENUM gain the acceptance from vendors, providers and regulators alike. Roadmap for ENUM Workshops and Plugtests in ETSI (www.etsi.org):

- 5 and 6 October 2004 - 2nd ETSI ENUM Plugtests Workshop
- 29 November to 3 December 2004 - Plugtests for IP Communications (SIP/H323/ENUM)
- 1Q 2005 -3rd ETSI ENUM Plugtests Workshop

Following the ETSI proposed roadmap, the first interoperability tests "Plugtests TM" will be taking place in November and December 2004 at ETSI headquarters in Sophia-Antipolis, France. Commercial deployments of ENUM are likely to follow as soon as early 2005.

On the vendor side, there are few established vendors like AG Projects (www.ag-projects.com), Verisign (www.verisign.com), Neustar (www.neustar.com) and NetNumber (www.netnumber.com). This can be explained by the fact that ENUM did not get enough attention from the investors and the market yet. The other side of the coin is that whoever catches the vendor train at this early stage, will likely get a share of the ENUM end-user market next year.

Is ENUM going to be a success story? I believe so judging by the pace of the VoIP and UMTS deployments but like always, only time will tell us.