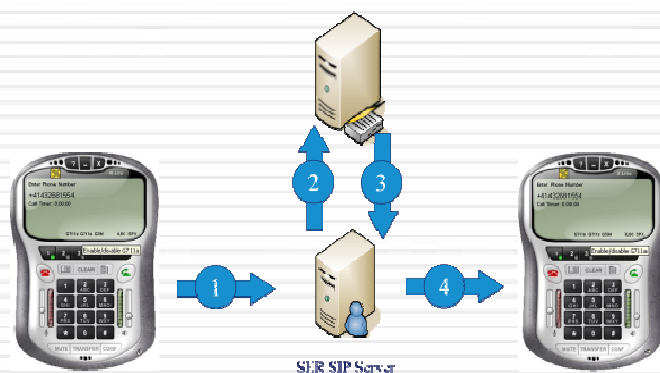


# ENUM

## An introductory guide

### How does ENUM work?



1. The SIP Client calls +61 59 00 23546
2. The SIP server sends an ENUM lookup to the DNS querying +61590023546 (reversed to 6.4.5.3.2.0.0.9.6.1.6.e164.arpa)
3. The SIP URI [kewin.stoekigt@aarnet.edu.au](mailto:kewin.stoekigt@aarnet.edu.au) is received
4. SIP Server sends the call to the SIP URI

This example shows how ENUM can be used with SIP, however, DNS could also return a PSTN number instead of a SIP URI. If calls traverse across AARNET's VoIP infrastructure these calls can also be routed to the public telephone network.

### Where can I get more information about ENUM?

AARNet is participating in a National ENUM Trial.

The Trial currently uses a specific number range.

Subject to ACMA approval, the intention is to use real numbers (landline, mobile) in 2006.

More details about ENUM are available online at:

#### ENUM Trial:

<http://www.enum.com.au>

#### ENUM @ AARNet:

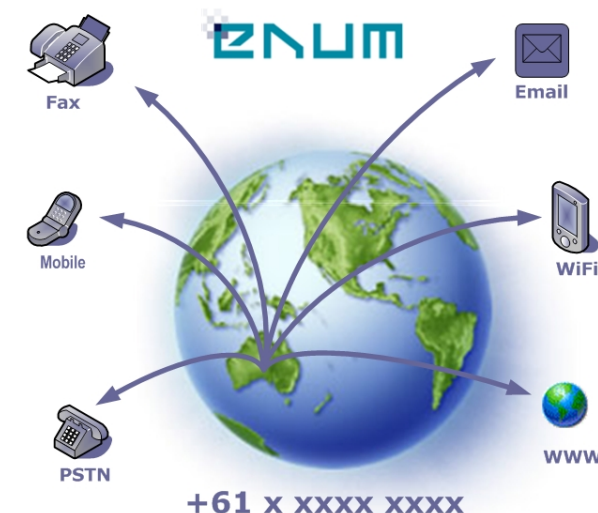
<http://www.enum.edu.au>

AARNet contact: [info@enum.edu.au](mailto:info@enum.edu.au)

#### AARNet Pty Ltd

<http://www.aarnet.edu.au>

<http://mirror.aarnet.edu.au>



## The benefits of ENUM

- **One number for all services.**
- **Service and device independent.**
- **Offers interfaces between various communication media such as public switched telephony, Voice over IP (VoIP), text messaging, and many more...**
- **Availability whenever and however you want it**
- **ENUM enables VoIP carriers to route VoIP calls to each other**
- **Reduced communication costs due to the use of VoIP, VoIP peering and access to other converging technologies**

## What is ENUM?

**ENUM** (tELEphone **N**UMber **M**apping) has been designed to map several resources from the telephony and data communications (Internet) world together under one unique identifier – The one number – ENUM.

Your ENUM can combine the standard telephone system with Voice over IP (VoIP) services, it can also bridge between these classical telecommunication media and Internet services such as Email or the World Wide Web.



## The idea behind ENUM

ENUM is an open standard that enables the Domain Name Service (DNS) to understand telephone numbers.

ENUM enabled applications puts control back into the hands of the user. You can specify when and how to be reached.

A single ENUM number can combine all your different communication mediums, such as your home phone, your office phone, the office fax number, your SIP account, or your videoconferencing number.

ENUM is also designed to handle e-mail, SMS or Web communications. ENUM means we no longer have to communicate to others about changes to personal or work telephone numbers for example.