

# **LONG IPv6 Web Tools**

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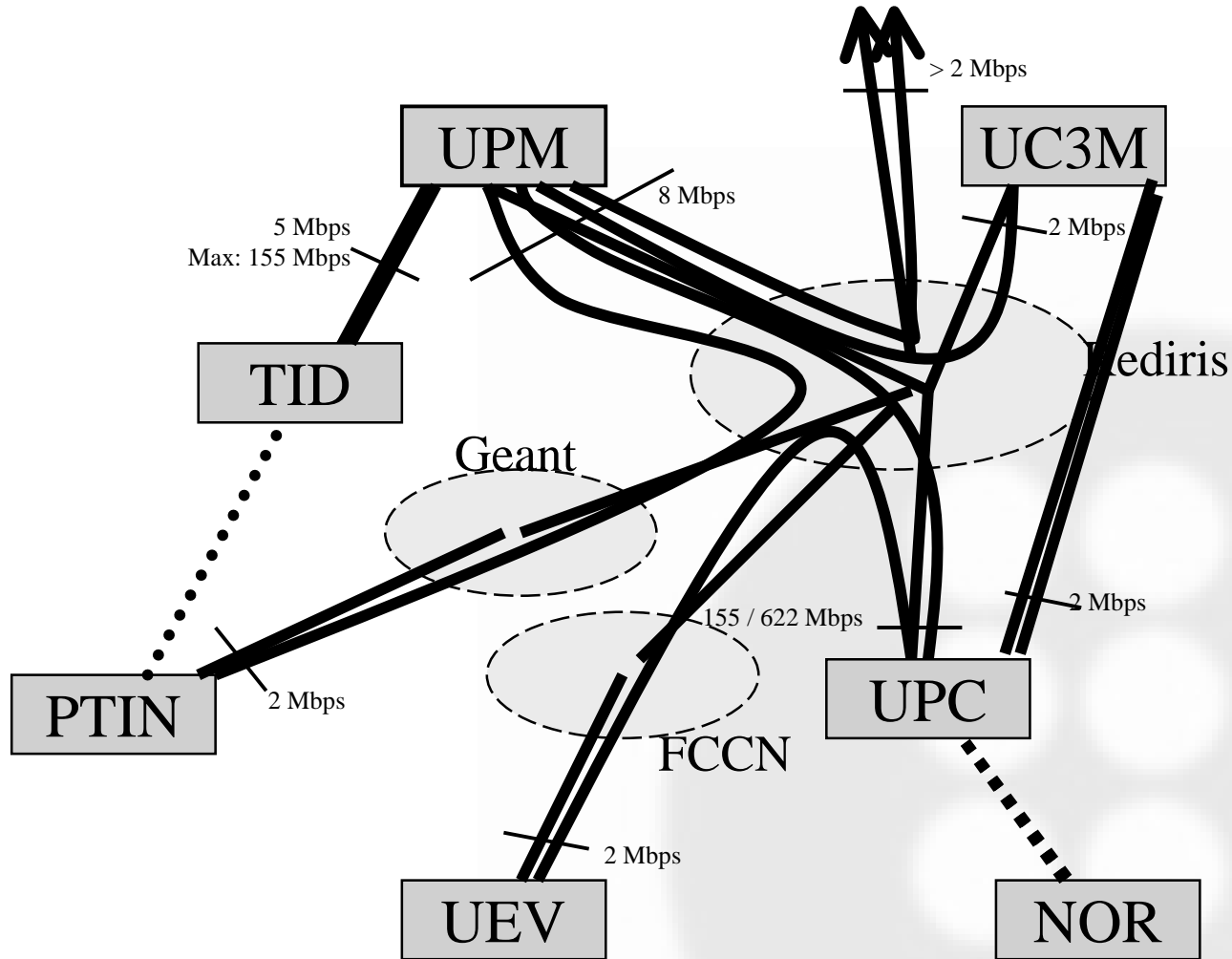
# LONG IPv6 Web Tools : **The LONG Project**

- LONG aims to foresee and solve problems related to the design, configuration and deployment of Next Generation Telecommunication networks (IPv6...) specially when new services and applications are carried out across them. In order to achieve these goals, LONG faces the following objectives:
  - To deploy a Next Generation testbed.
  - To adapt and validate a representative set of applications to the Next Generation Network scenarios.
  - To perform trials and experiments.
  - To develop guidelines for migration of networks and applications and disseminate results.



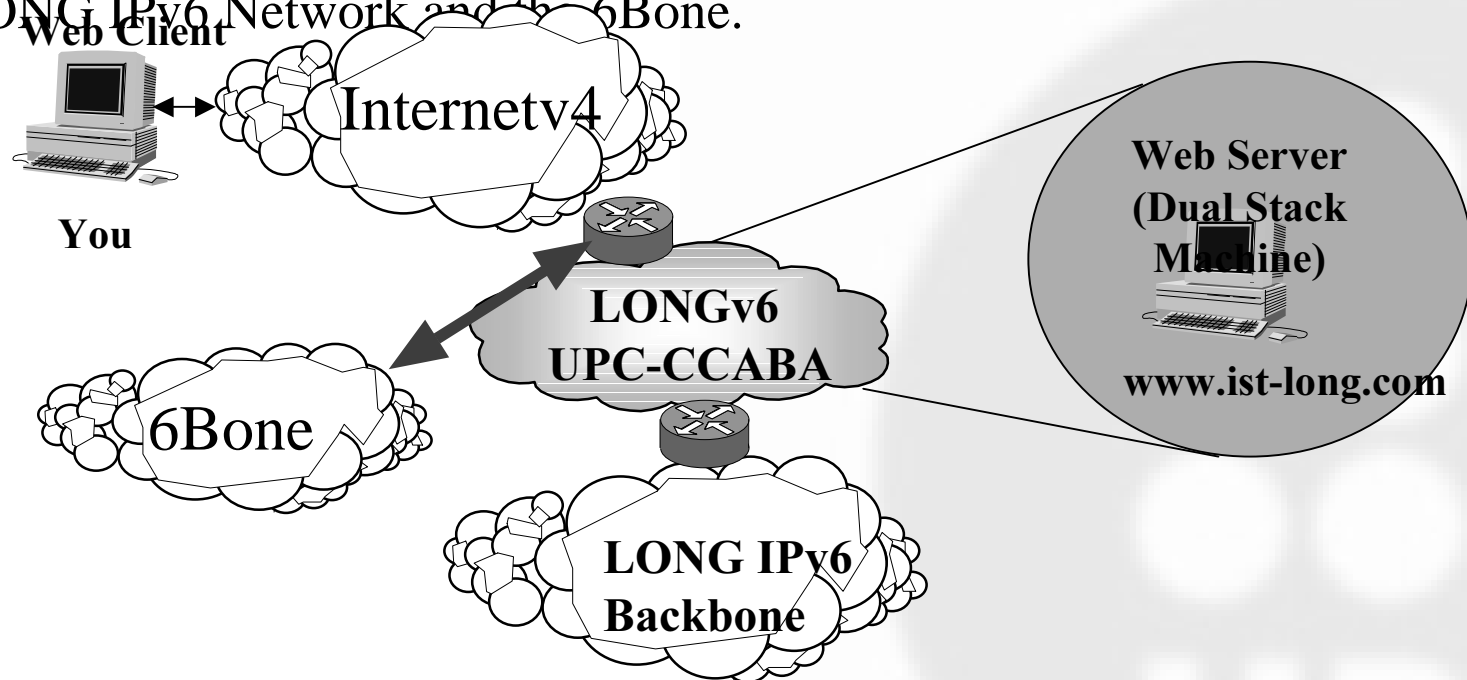
# LONG IPv6 Web Tools : The LONG IPv6 Backbone

- IPv6 over ATM 
- IPv6 over IPv4 
- Backup over inet 
- Planned 
- Physical link (shared) 
- Physical link (quaranted) 
- Reserved for link to others (events) 



# LONG IPv6 Web Tools : Objectives

- The main goal is that real users can try some LONG IPv6 services without patching his computers.
- The are at the LONG web server: <http://long.ccaba.upc.es>
- A dual stack web server is connected to three networks, the IPv4 Internet, the LONG IPv6 Network and the 6Bone.



# LONG IPv6 Web Tools : **Basic Networking Tools**

- The basic networking tools are implemented with cgi's in perl on the web tools.
  - Ping6.
  - Traceroute6.
  - Mtr (Matt's Traceroute) – A useful combination between traceroute6 and ping6.
  - Nslookup (dig in ipv6)
- You can use them from your IPv4 Browser and ping6 (for example) any LONG IPv6 host.
- Due to the Web tools are also connected to the 6Bone you can also ping6 the 6Bone.



# LONG IPv6 Web Tools : Basic Networking Tools

LONG IPv6 Tools - Microsoft Internet Explorer

Archivo Edición Ver Favoritos Herramientas Ayuda

← Atrás → Búsqueda Favoritos Multimedia

Dirección <http://long.ccaba.upc.es/long/tools/> Ir

NAME	IPv6 ADDRESS
www.upc.long (this host, the LONG Web Server)	3ffe:3326:3:916::302
Cocodrilo6.tid.long (LONG DNSv6 Server)	3ffe:3328:6:3::148
cantonal.tid.long (LONG SendMailv6 Server)	3ffe:3328:6:2::5
oslo.upm.long	2001:720:1500:1:2e0:7dff:feba:38bb
isabel6.upc.long (UPC-LONG Isabelv6 Machine)	3ffe:3326:3:916::402
Any 6Bone Host	Any 6Bone address

IPv6 Address or hostname to **ping**:  Packet Size:  Count:

[How does this work?](#)

IPv6 Address or hostname to **Mtr**:  Data size:  Number of Packets:

*Mtr (Matt's Traceroute) combines the functionality of the 'traceroute' and 'ping' programs in a single network diagnostic tool. Mtr first determines the address of each network hop between the user machine and the destination host, then it sends a sequence ICMP ECHO-REQUEST to each one to determine the quality of the link.*

[How does this work?](#)

IPv6 Address or hostname to **traceroute**:  Data size:

[How does this work?](#)

IPv6 Address or hostname to **NsLookUp**:


[How does this work?](#)

Send an IPv6 Mail:  
Fill in this form and send an IPv6 mail (that will travel through the LONG IPv6 Network) to any IPv4 user. The mail will use two Sendmailv6 Servers while traveling through the LONG IPv6 Backbone.

Listo Internet



# LONG IPv6 Web Tools : Basic Networking Tools



LONG IPv6 Tools - Microsoft Internet Explorer

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Dirección <http://www.ccaba.upc.es/cgi-bin/ping.pl>

**LONG**

LONG IPv6 TOOLS

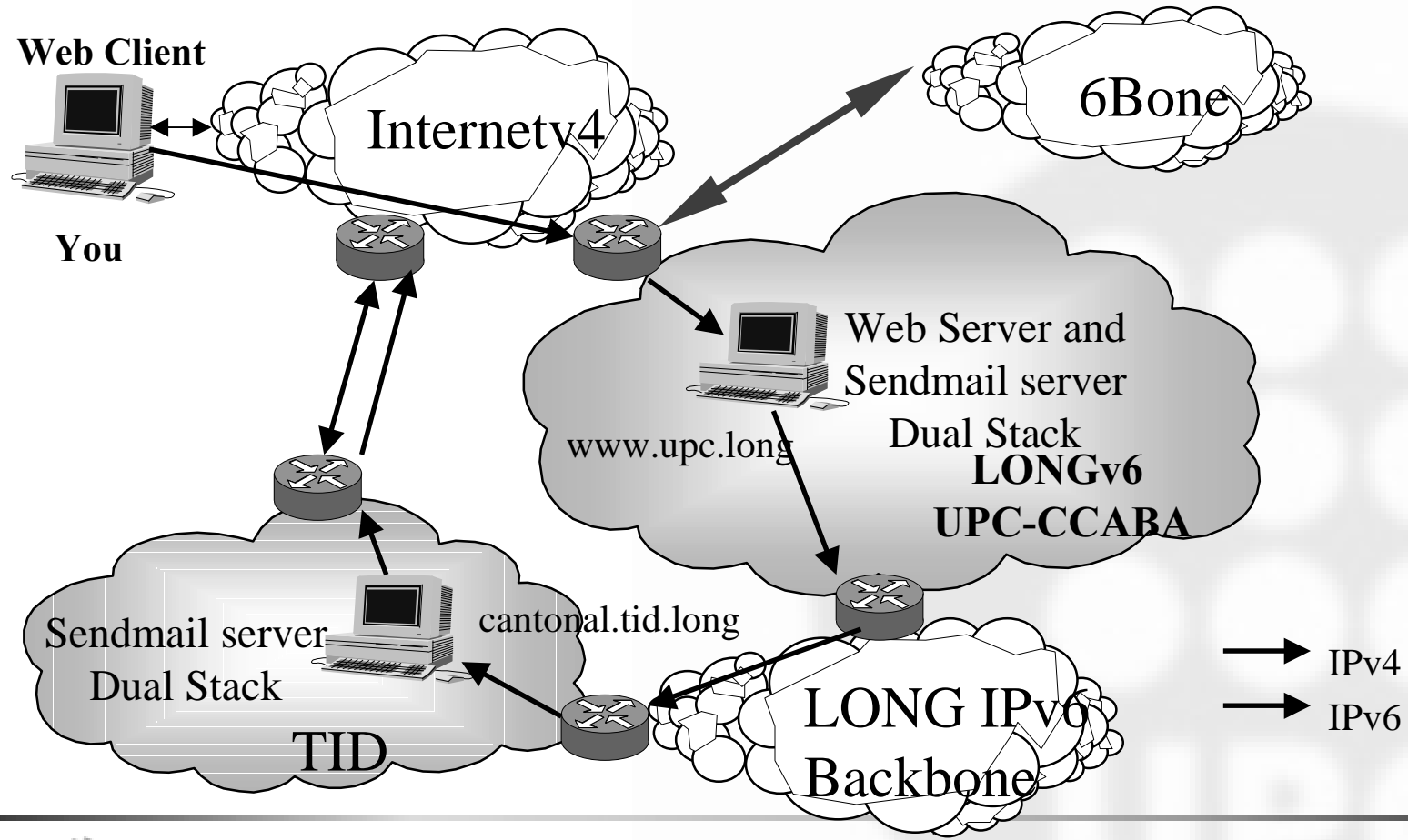
Pinging host: **alacran.uc3m.long** 5 times, generating 64 bytes ICMPv6 packets.

```
PING alacran.uc3m.long(2001:720:410:1001:2c0:26ff:fea3:5df6) 56 data bytes
64 bytes from 2001:720:410:1001:2c0:26ff:fea3:5df6: icmp_seq=0 hops=61 time=13.376 msec
64 bytes from 2001:720:410:1001:2c0:26ff:fea3:5df6: icmp_seq=1 hops=61 time=13.428 msec
```



# LONG IPv6 Web Tools : SMTP IPv6

- Several IPv6 SMTP servers are running at the LONG IPv6 Network.
- From the Web Tools you can send an IPv6 mail to any IPv4 user.





# LONG IPv6 Web Tools : SMTP IPv6

## Send an IPv6 Mail:

Fill in this form and send an IPv6 mail (that will travel through the LONG IPv6 Network) to any IPv4 user. The mail will use two Sendmailv6 Servers while traveling through the LONG IPv6 Backbone.

Enter your name here:

The destination e-mail address here:

Enter the subject here:

Enter the text mail here:

# LONG IPv6 Web Tools : SMTP IPv6

**Return-Path:**<long-team@xardonay.ccaba.upc.es>

**Received:** from sert.ac.upc.es (sert.ac.upc.es [147.83.30.70]) by roura.ac.upc.es (8.11.6/8.11.0) with ESMTP id g4SDLrm21040 for <acabello@ac.upc.es>; Tue, 28 May 2002 15:21:53 +0200 (MET DST)

**Received:** from cantonal (unknown [194.179.25.37]) by sert.ac.upc.es (Postfix) with ESMTP id 242724500 for <acabello@ac.upc.es>; Tue, 28 May 2002 15:21:53 +0200 (MET DST)

**Received:** from [3ffe:3326:3:916::302] (helo=xardonay.upc.long) by cantonal with esmtp (Exim 4.04) id 17Ch6M-0001Ux-00 for acabello@ac.upc.es; Tue, 28 May 2002 15:33:26 +0200

**Received:** from localhost.localdomain (xardonay.ccaba.upc.es [147.83.130.130]) by xardonay.upc.long (8.12.2/8.12.2) with SMTP id g4SCRs46010848 for <acabello@ac.upc.es>; Tue, 28 May 2002 14:27:54 +0200



# LONG IPv6 Web Tools : LDAP IPv6

- Two LDAP IPv6 Servers are installed at the LONG IPv6 Network One at UPM administrating the information about people from there, and another one, at UPC administrating the information about the rest of the LONG team.
- From your IPv4 browser you can query this servers.

LDAP6 Queries: Here you can ask for the e-mail of LONGERS. Type an "\*" if you want to see all the members of a partner.

Name of the person to query:   Query on:

Querying User: **Alberto Cabellos** at **long**.

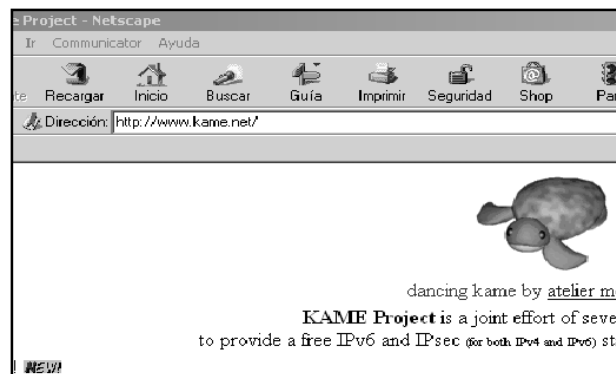
```
dn: cn=Alberto Cabellos Aparicio, dc=upc, dc=long  
mail: "acabello@ac.upc.es"
```

```
# refldap://2001:720:1500:1::a100/dc=upm,dc=long
```

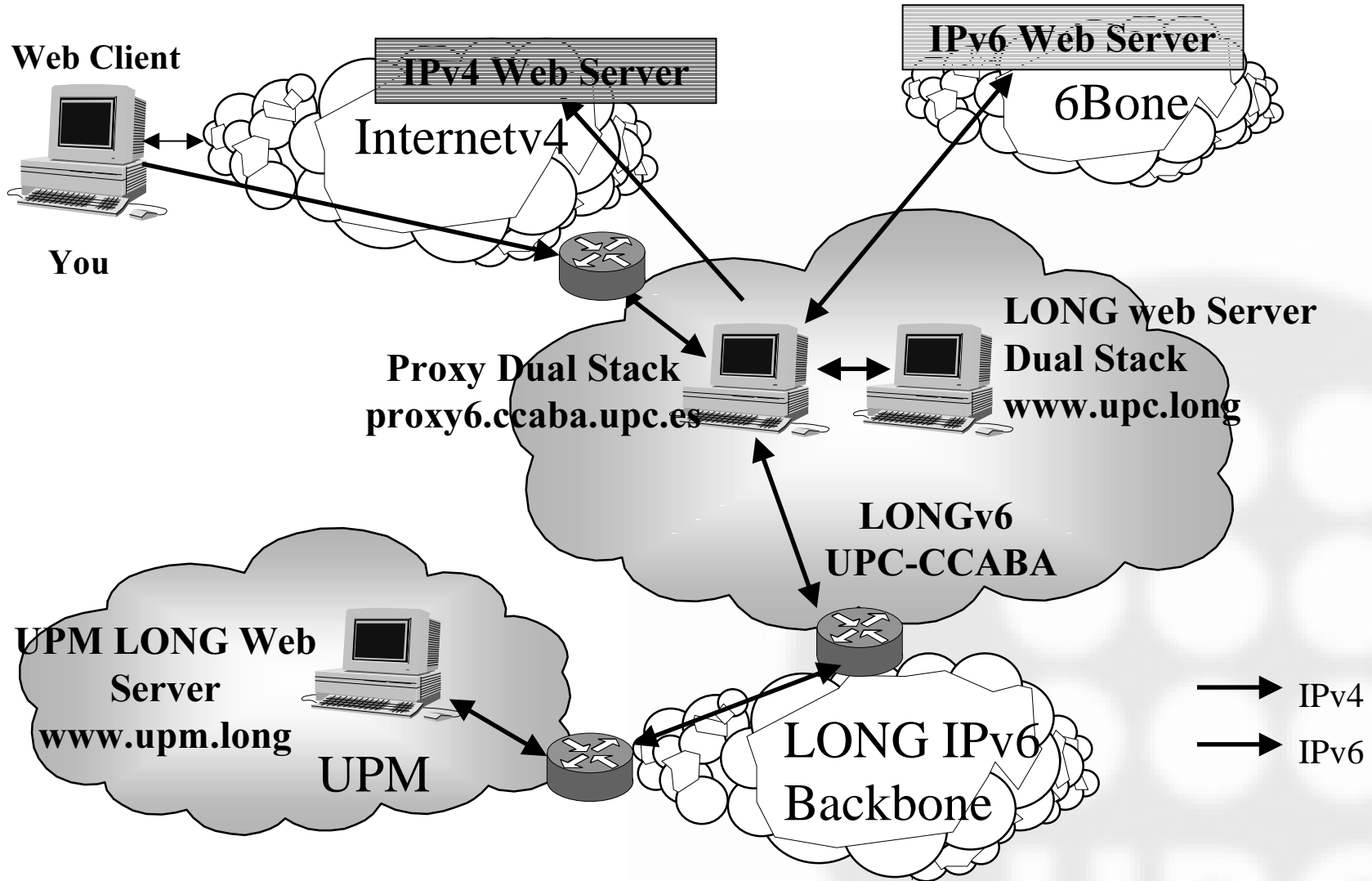
Finished.

# LONG IPv6 Web Tools : Proxy IPv6

- A Web/Ftp proxy is installed at the UPC. It is installed on a dual stack machine connected to Internet IPv4, 6Bone and LONG IPv6 Network
- If you configure your IPv4 browser to use this proxy you will be able to view any IPv6 web page and download files from any IPv6 FTP without patching your computer!
- The proxy will forward queries IPv4 and IPv6. So, if you are connected to the 6Bone, you can also use it to view IPv4 web pages.



# LONG IPv6 Web Tools : Proxy IPv6



## LONG IPv6 Web Tools : **Other Services**

- More services are available at the LONG web:
  - **IRC Gateway:** With this tool, you can connect to any IPv6 IRC server without patching your computer (for example the LONG IPv6 IRC server).
  - **MRTG:** This tool shows the link occupancy of the LONG IPv6 Backbone.
  - **Network Map:** This tool shows an updated network map of all the LONG IPv6 Network. Including hosts and routers.
  - **BGP4+:** This tool shows updated information about our routing protocol, BGP4+

# LONG IPv6 Web Tools : Questions



**Try web-tools at: <http://long.ccaba.upc.es>  
or <http://www.ist-long.com>**