

Servicio de Túneles

IPv6

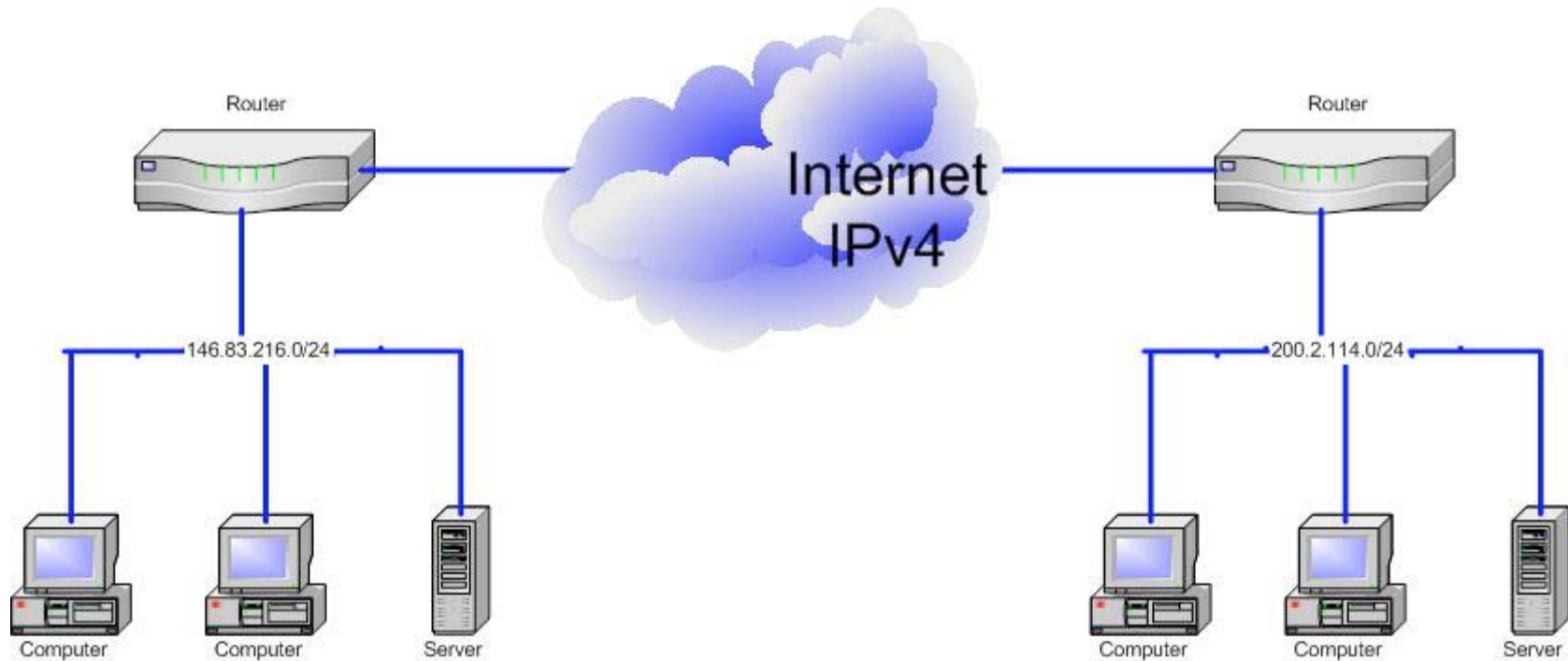
Christian Lazo R.
Costa Rica 2004



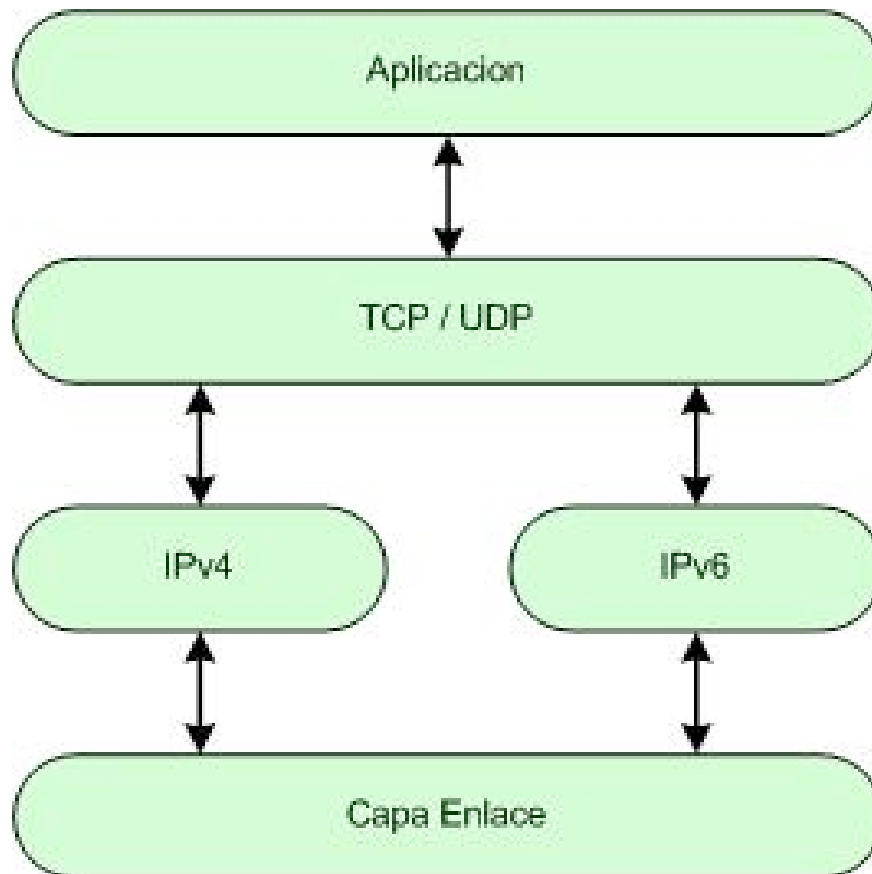
Universidad Austral de Chile
Conocimiento y Naturaleza



Estado Original de Internet



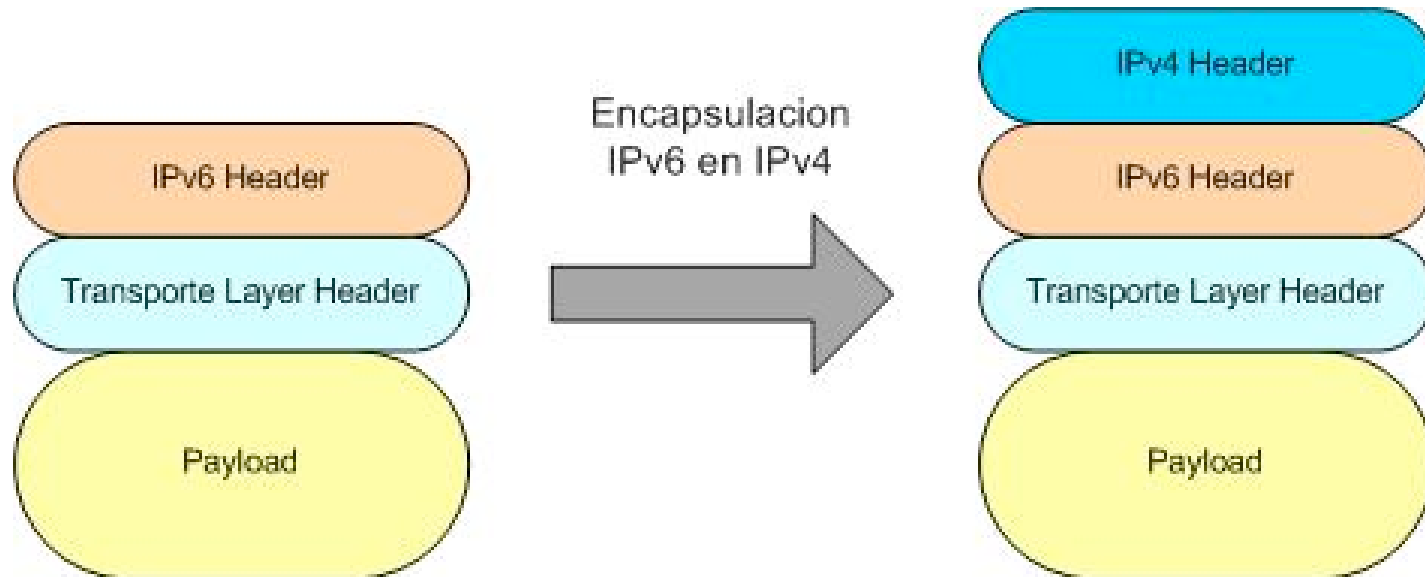
Doble Pila (stack)



- Mecanismo que Facilita la transición
- Host y Router con IPv4 e IPv6 habilitados
- Las aplicaciones pueden usar ambos protocolos
- La resolución de nombres responde a los dos protocolos

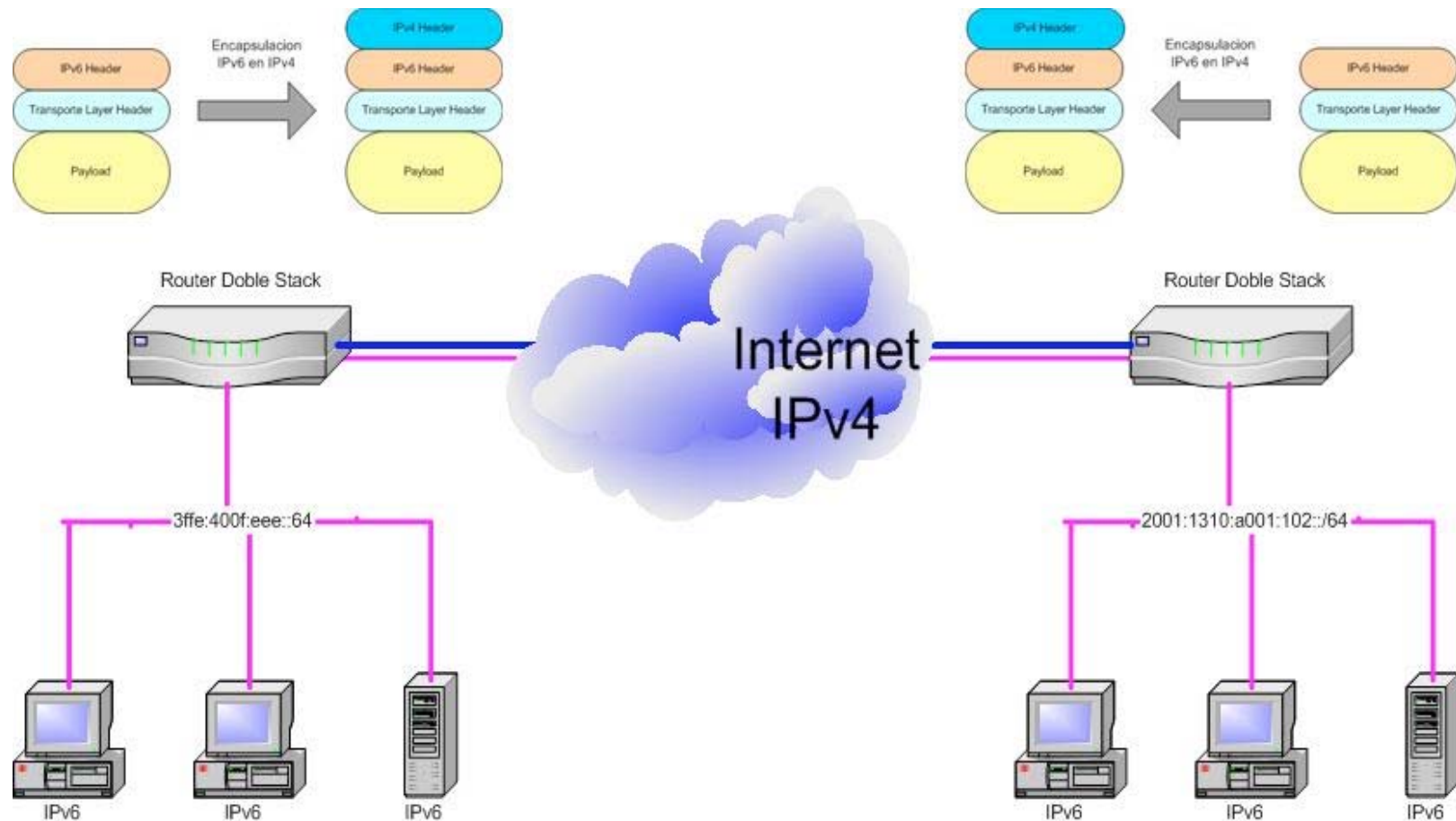
IPv6 sobre Ipv4

Túnel manual



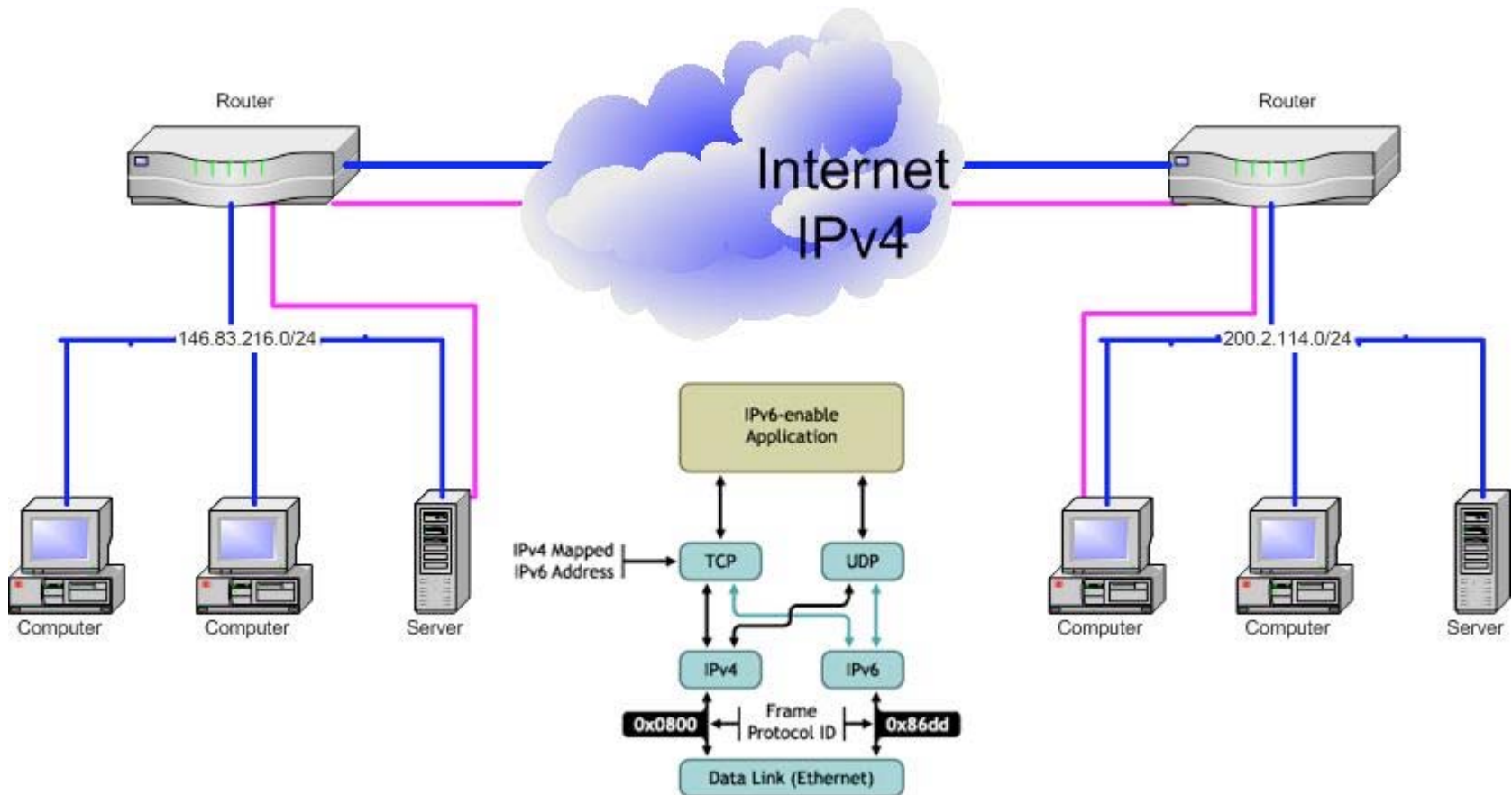
- No todo es doble stack (Internet)
- Encapsular IPv6 sobre IPv4 (Túnel)

Simple Internet Transition (SIT)



Enviar paquetes IPv6 con una cabecera IPv4, de forma que el tráfico IPv6 pueda enviarse sobre una infraestructura IPv4. En la cabecera IPv4, el campo de Protocolo toma el valor 41.

Túneles Automáticos



Creación automática de túneles que se emplea con direcciones IPv6 compatibles con IPv4.

Túneles Automáticos

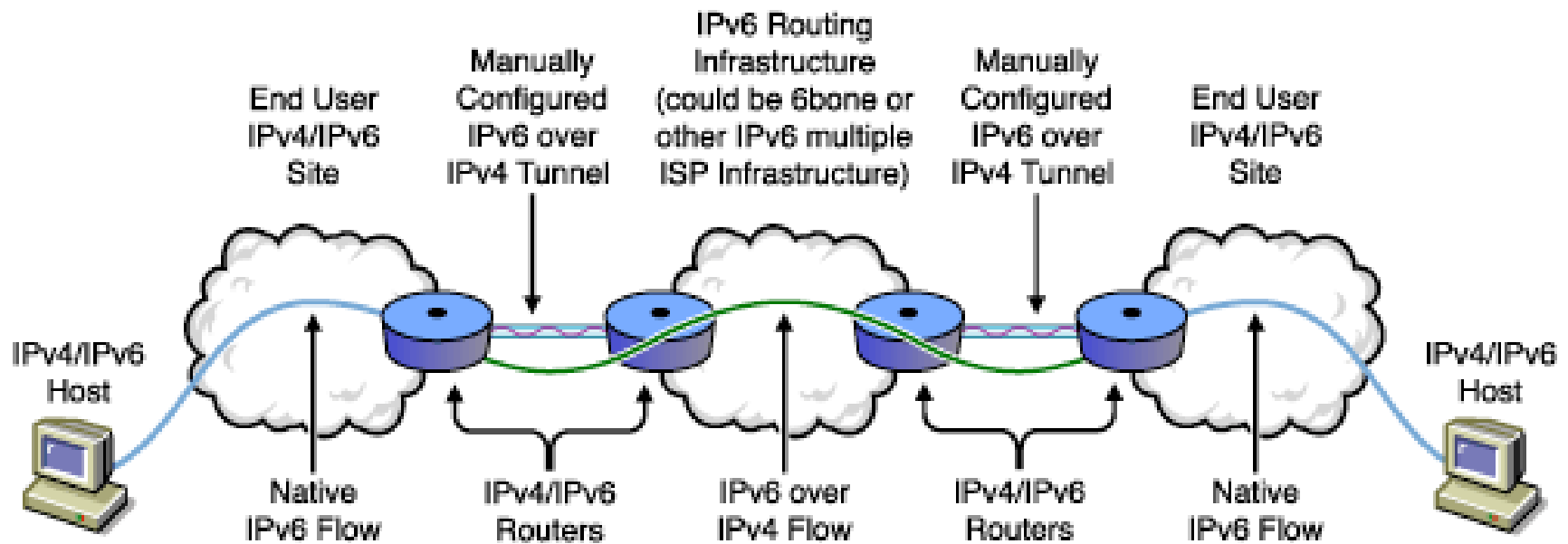


Router-to-Router and Host-to-Router Configured Tunneling



Router-to-Router and Router-to-Host Automatic Tunneling

Túneles Automáticos

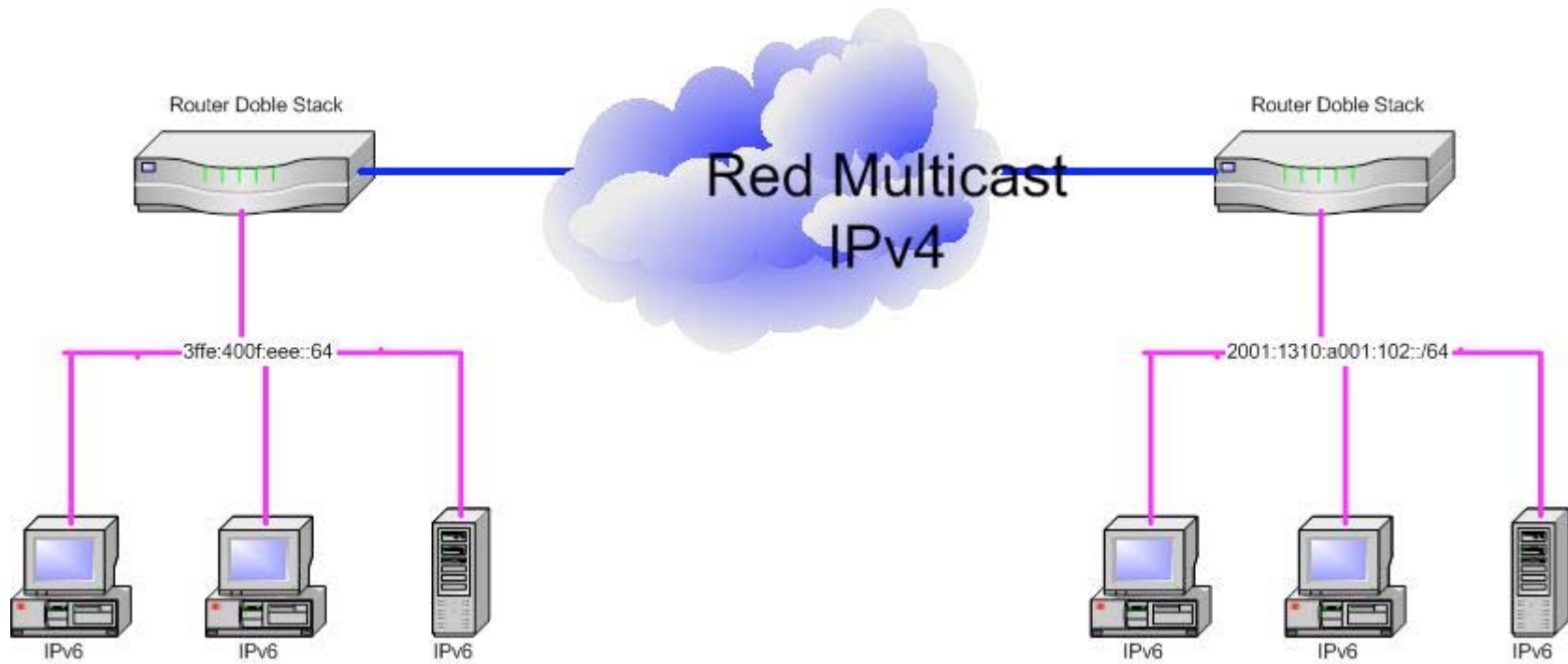


TÚNEL IPV4 MULTICAST

6 over 4

Una tecnología IPv6 diseñada para favorecer la coexistencia con IPv4, que proporciona conectividad unicast y multicast a través de una infraestructura IPv4 con soporte para multicast, empleando la red IPv4 como un enlace lógico multicast.

6 over 4

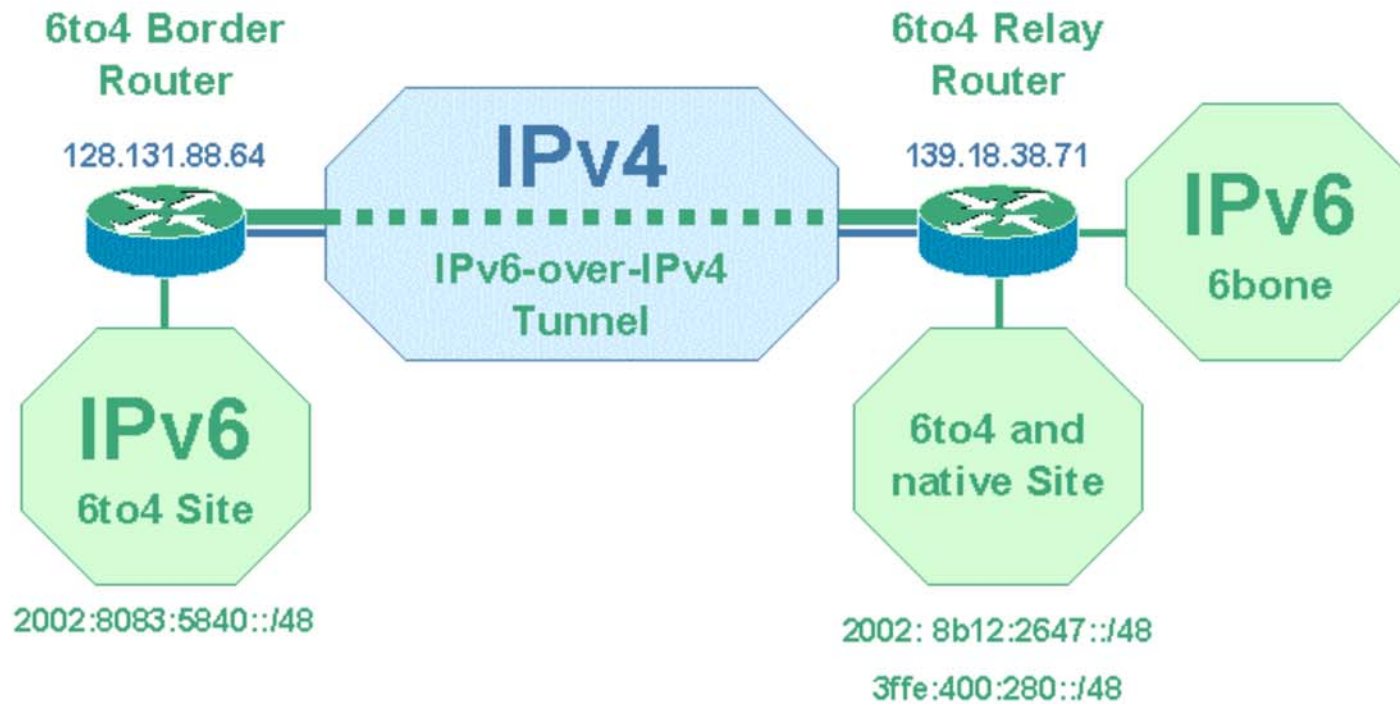


6to4

001	13 bits	32 bits	16 bits	64 bits
FP	0002	IPv4 Address	SLA ID	Interface ID

Una tecnología IPv6 diseñada para favorecer la coexistencia con IPv4, que proporciona conectividad unicast entre redes y máquinas IPv6 a través de una infraestructura IPv4. 6to4 utiliza una dirección pública IPv4 para construir un prefijo global IPv6.

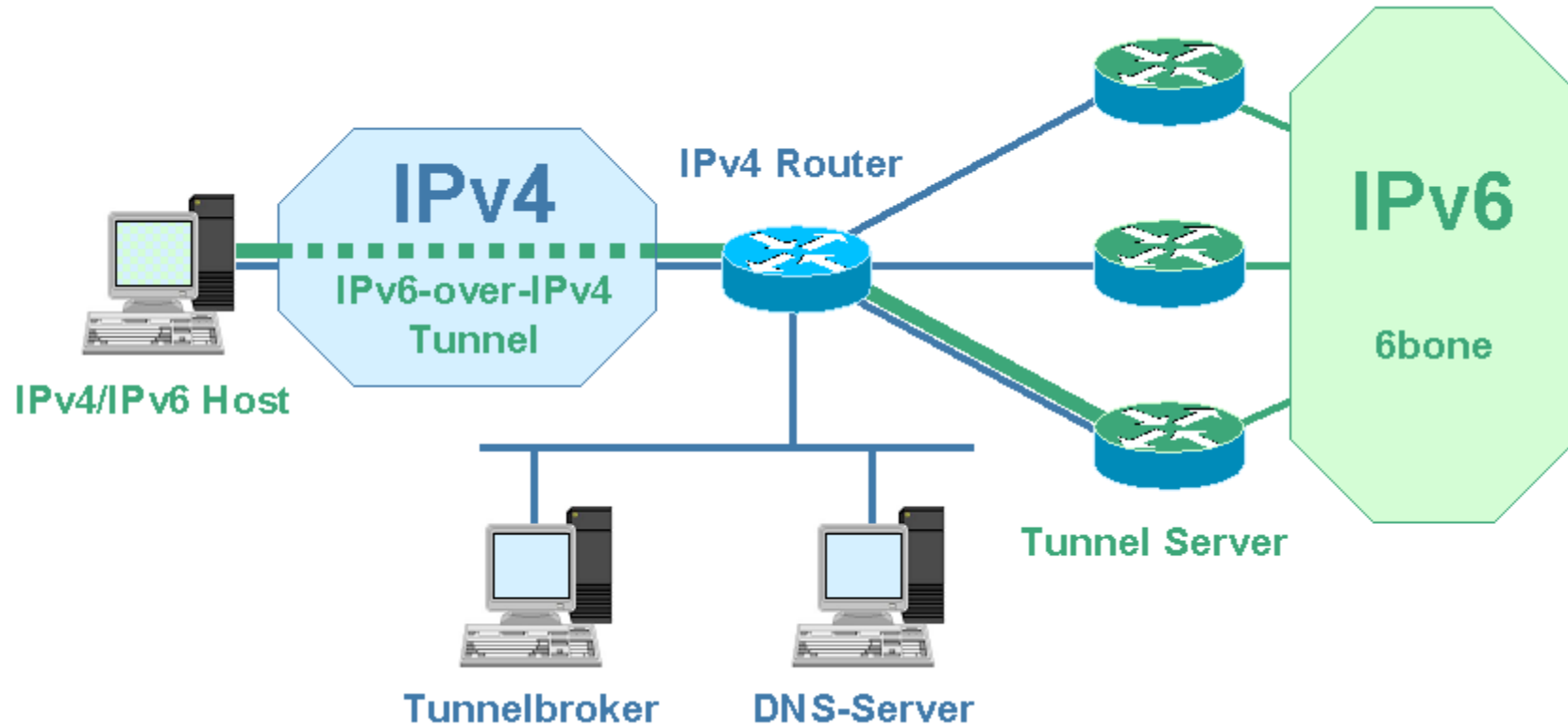
6to4



Túnel Broker

- RFC 3056 “IPv6 Tunnel Broker”
- ISP da conectividad IPv6 sobre IPv4 Túneles
- Aplicaciones sobre WEB que interactúan sobre router y DNS
- Entregan Scripts para los clientes

Túnel Broker



[Get IPv6 in 3 steps](#)

Support for Migration Broker Owners

I.D. PASSWORD

PRODUCT & SERVICES

FREENET 6

SUPPORT

DOWNLOAD

CORPORATE

Hexago » Freenet 6 » Get IPv6 Now! – In 3 Steps

Get IPv6 Now! – In 3 Steps

-  1. Create your Freenet6 account
-  2. Download the TSP client
-  3. Install and run the client

Step 1 – Create your Freenet6 account

Please enter your coordinates in order to create an account on the Freenet6 service. A confirmation email containing an automatically generated password will be sent to your email address.

Fields marked with an orange title are mandatory.

Full name**Desired userid****Company name****Mailing address**

IPv6

Solutions for:

- Defense & Government
- ISP & Telecom
- Research & Education
- Enterprise

[Engineering support site for peerings, registries and services.](#)

What's New

October 1st, 2004

Hexago had named a new Director of Business Development; [Michael Fox](#), a [20 year telecom industry veteran](#), joined the [company](#).

September 28th, 2004

The recently released TSP Client version 2.1.1 now supports Service Pack 2 on Windows XP. [Go to Download TSP](#).

September 27th, 2004



IPv6 Tunnel Broker



This service allows you to create an IPv6 over IPv4 tunnel between your router or host and router at our premises. For doing that you need to register yourself in the [registration page](#). If you are already registered, you only need to authenticate yourself in the [authentication page](#).

Read [this information](#) if you want to know how to use a private IP address in a tunnel end point.

1. In order to check if you already have IPv6 installed in your computer, select your operating system:

Windows XP 

2. Check [here](#) if you already have IPv6 connectivity.

[Management Page](#)

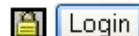
You are using IPv4 from 200.2.117.251



Login

Username:

Password:



Hurricane Electric's IPv6 Tunnel Broker

Welcome to the Hurricane Electric IPv6 Tunnel Broker! Our free tunnel broker service enables you to reach the IPv6 Internet by tunnelling over existing IPv4 connections from your IPv6 enabled host or router to one of our IPv6 routers. To use this service you need to have an IPv6 capable host (IPv6 support is available for most platforms) or router which also has IPv4 (existing Internet) connectivity. Our tunnel service is oriented towards developers and experimenters that want a stable permanent tunnel.

Advantages of using our tunnel service over others include:

- Run by a Business ISP with 24 x 7 staff at multiple locations and a national US backbone (to find out more about IPv6 at Hurricane Electric visit <http://ipv6.he.net>)
- Ability to get your own /64 prefix once your tunnel is up
- Ability to get a full view of the IPv6 BGP4+ routing table
- Ability to setup your tunnel now after a simple registration and activation process. (It takes less than a minute.)

To use this free service you must have IPv6 support on your host or router. If you don't have IPv6 support yet please read more about IPv6 at a site like hs247.com first.

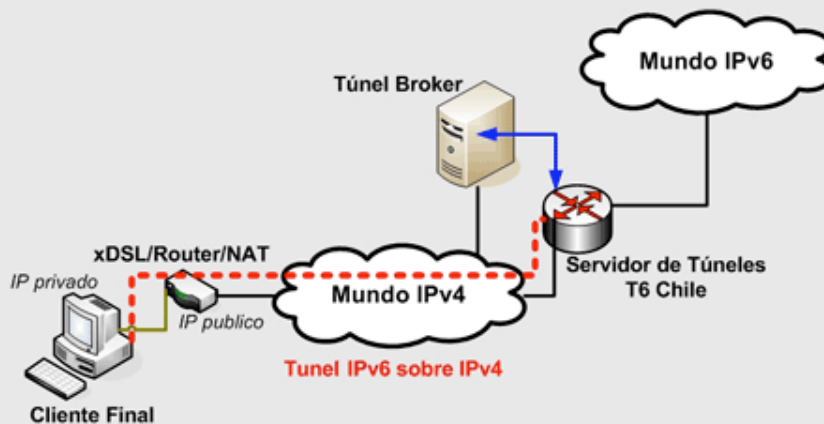
T6 Chile

MENU

- INICIO
- REGISTRO
- FAQ
- CONTACTO

Túnel Broker T6

T6 Chile proporciona una herramienta para la transición desde IPv4 hacia IPv6 a través de Túnel Broker. Con el Servidor de Túneles se le proporciona al usuario un IPv6 válido sobre la red IPv4 y un prefijo DNS para facilitar la localización del cliente final.



Dudas, preguntas y recomendaciones en [FAQ](#).

Login

Usuario

Password

Disfruta el Servicio, pues es gratis. ;)

Conección por IPv4, desde: 200.2.117.251
Todos los Derechos Reservados





Referencias

- RFC 2185 Routing Aspects Of IPv6 Transition
- RFC 2473 Generic Packet Tunneling in IPv6
- RFC 2529 Transmission of IPv6 over IPv4 Domains without Explicit Tunnels
- RFC 3053 IPv6 Tunnel Broker
- RFC 3056 Connection of IPv6 Domains via IPv4 Clouds