



Viagénie 's presentation

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January 2000

Viagénie

- Consulting firm in IT, specialized in:
 - Security
 - E-commerce
 - Advanced networks on IP
 - Multimedia (videoconferences over IP / ATM), VoIP, streaming, multicast)
 - IPv6
 - Internationalisation (i18n)
- R&D:
 - IPv6
 - DSI, QoS
 - deeply involved in IETF (many drafts)

IPv6 work done

- First IPv6 site connected to the 6Bone in Canada (January 1997)
- pTLA on the 6Bone for Canada
- Architecture, addressing plan and deployment of the IPv6 CA*NET2
- International connectivity of IPv6 CA*net2
 - with Merit, Sprint, 3Com, Singapore, Japan , Greece, Spain, Argentina, US(vBNS, Esnet, ...)
- Implementation of a tunnel server (freenet6.net)
- 6TAP engineering, with ESnet

IPv6 work done

- freenet6.net (tunnel server)
 - Free and user-friendly tunnel server access to the 6Bone
 - More than 3000 users, worldwide



FreeNet6:
Create your own tunnel

First, select the Operating System you are using. After, you'll only need to follow the instructions

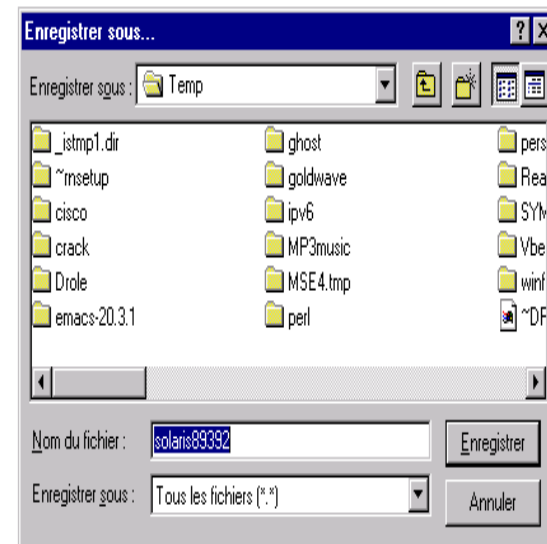
- [FreeBSD/NETA](#)
- [FreeBSD/FRAME](#)
- [Windows NT](#)
- [Cisco client](#)
- [Linux Debian GNU](#)
- [Solaris 8](#)

IPv6 Tunneling with

Validate or correct your IPv4 address:

Enter your nickname:

Select your country:



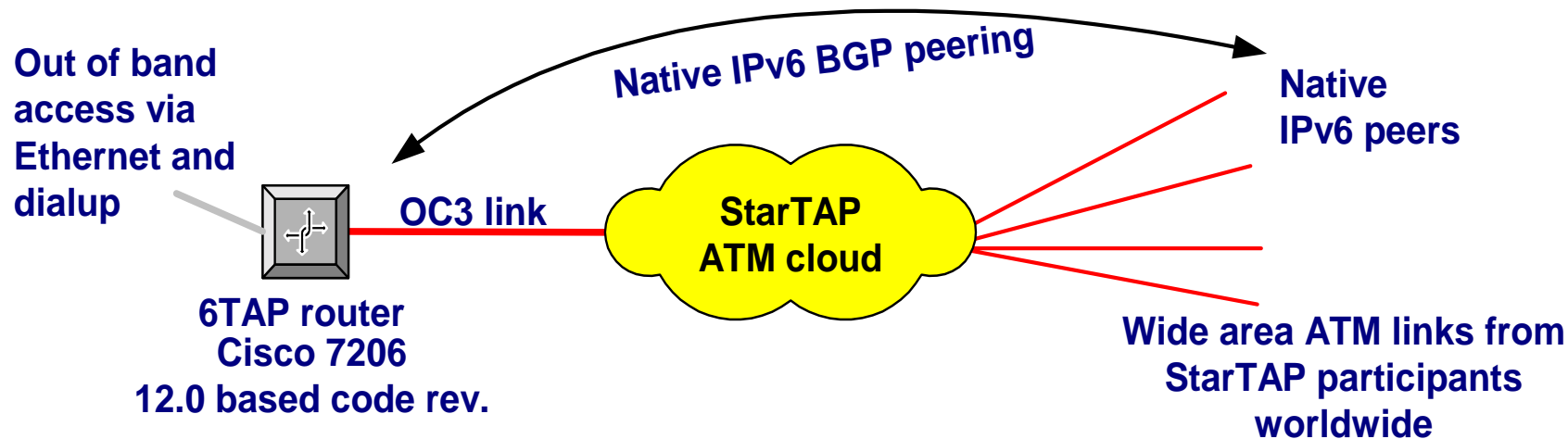
<http://www.freenet6.net>

IPv6 exchange (6TAP)

- Exchange facility for the R&E IPv6 traffic
- Located at Chicago StarTAP
- Layer 3 IPv6 (IPv6 over ATM + IPv6 over IPv4)
- Deployment phases (3):
 1. Router accepts IPv6 connectivity from ATM PVCs
 2. Tunnel server for networks without ATM connectivity
 - 2.5 Statistics about IPv6
 3. Route server for IPv6
- Users: Japan, Korea, NTT, vBNS, SingaREN, Cern, Esnet, and Canarie/Viagénie

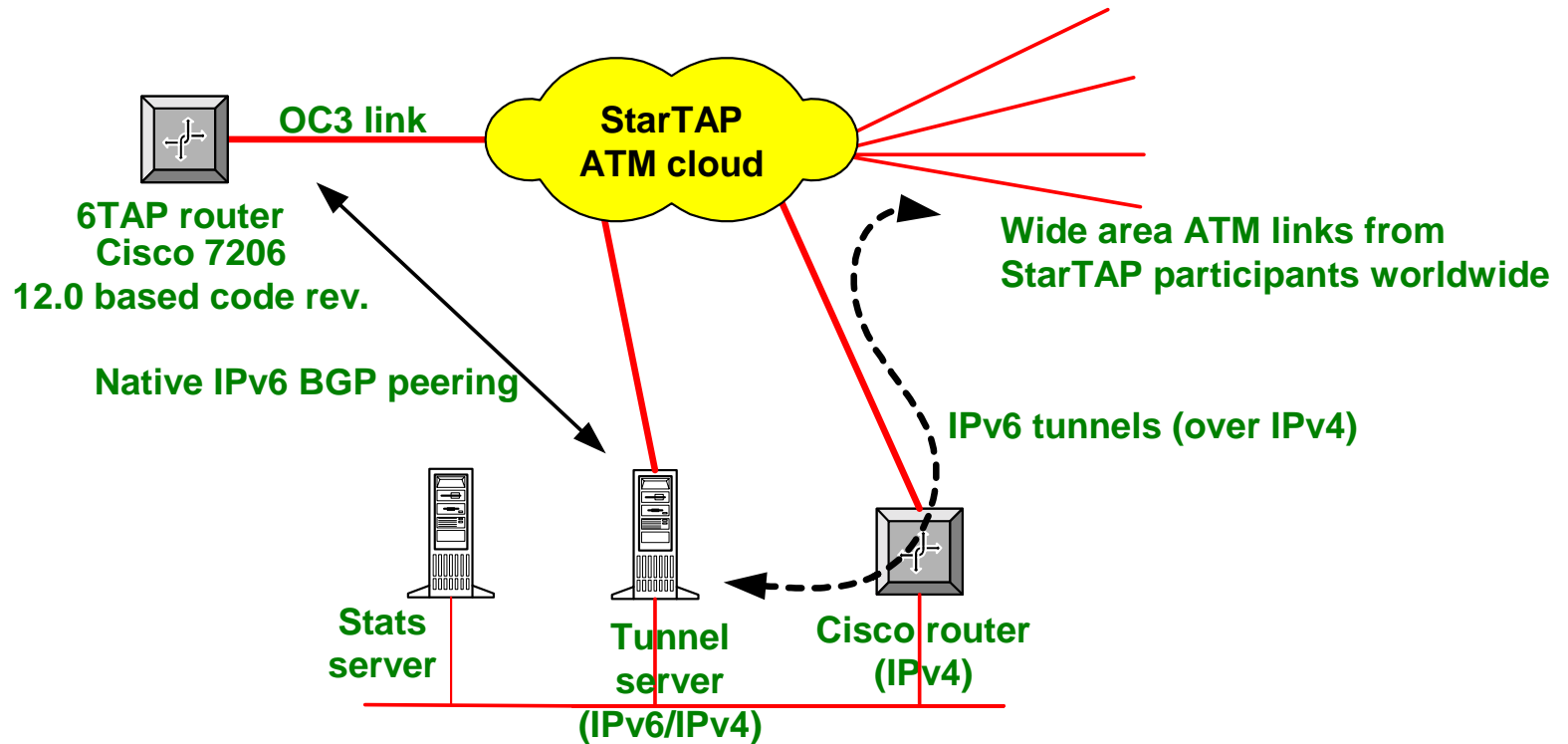
6TAP Phase I

- Preliminary design



6TAP Phase 2

Tunnel server (IPv6 over IPv4)



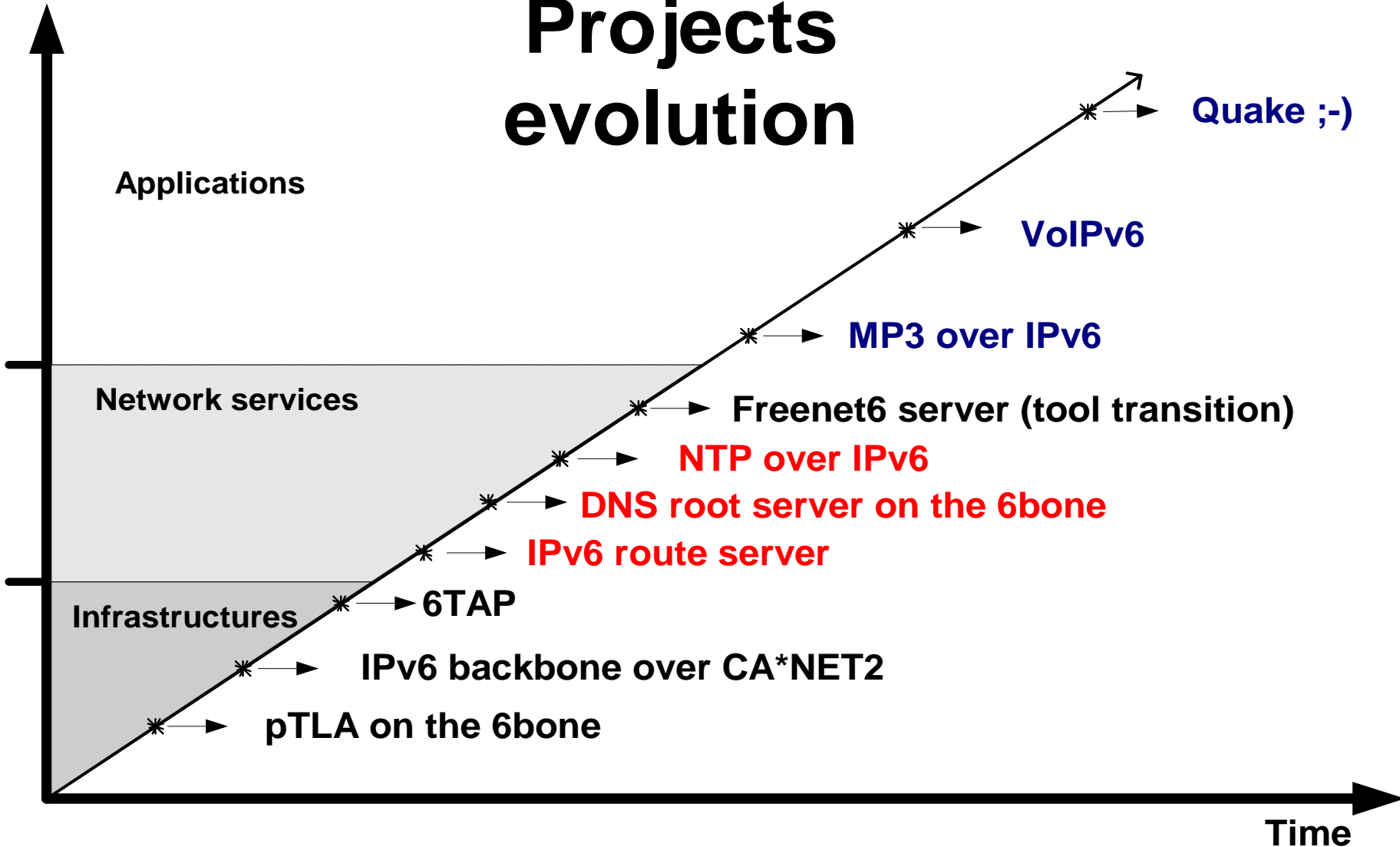


Current work

- DNS root server on the 6Bone (the first DNS root server on IPv6)
- IPv6 route server
- NTP over IPv6
- MP3 over IPv6
- Quake (the game) in multiplayer

Current and future work

Projects evolution





Viagénie's expectations and contribution to 6INIT

- To know what 6INIT has done in IPv6 and intend to do in the future
- To develop relationship between Europe and North America in some projects
- To deploy international infrastructures, services and applications to promote IPv6
- To share experiences and technical knowledge
- To develop strategic tools to allow an easy and steady migration from IPv4 to IPv6



Viagénie's expectations and contribution to 6INIT

- To share experimental codes and applications
- Some possible areas of participation in 6INIT project:
 - Multimedia
 - Security
 - QoS
 - Multicast

References

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- <http://www.viagenie.qc.ca>
- <http://www.6pop.canet2.net>
- <http://www.freenet6.net>
- <http://www.6tap.net>
- <http://www.normos.org>