PRESS RELEASE

Saint Quentin en Yvelines, September, the 16th 2003

IPv6 fully integrated in the Production System of AFNIC from October, the 1st 2003

Each computer connected to the Internet is currently identified by a number called "IPv4 address" (IPv4 stands for Internet Protocol version 4). After decades of unstinting devotion, IPv4 is approaching address space exhaustion and it needs to be gradually replaced by a new version, IPv6, which will enable an almost infinite number of computers to be connected to the Internet.
The venue of IPv6 is not only going to renew the current Internet but it is also going to bring thorough changes in the different uses of the Internet. IPv6 is expected to pervade several new areas such as health, remote management, domotics, agriculture (traceability), mobility (cars, ships), etc.

Today, AFNIC, the French Registry, has become a key actor in the IP next generation deployment in France, as it is supporting IPv6 in the DNS (Domain Name System). The DNS is a critical Internet service infrastructure and it has to become IPv6-ready in order to enable other applications to use IPv6 transport. The DNS is indeed queried by common Internet applications for resources they need (IP addresses, mail servers), in order to communicate with each other.

As a member of the French IPv6 Task Force Steering Committee, AFNIC is setting the example: *from the first of October 2003, IPv6 will be fully integrated in its Production System* as well as in the new version of ZoneCheck, its wellknown DNS zone checking tool.

A long maturation process

AFNIC has been involved in IPv6 as early as September 2000. At that time, a testbed was set up in order to experiment IPv6 operation and new functionality. The tests results were satisfactory enough to start IPv6 pre-production activity.

Since November 2001, AFNIC has been running an official DNS server (ns3.nic.fr) for FR and RE zones with native IPv6 support. NS3 is hosted at the SFINX, an Internet Exchange Point managed by Renater (the French National Research and Education Network). It is connected to the Internet (IPv4 and IPv6) via Renater3, Renater's IPv4/IPv6 network. The good location and connectivity of NS3, give the DNS zones hosted on it better visibility and accessibility from ISPs present at SFINX. **France is the second ccTLD (country code Top Level Domain) in the world, after Japan (JP), to support IPv6 on its DNS servers**. Note that NS3 is also an official server (secondary) for about 14 other ccTLDs (AF (Afghanistan), DZ (Algeria), ES (Spain), MY (Malaysia)...).

AFNIC started to take IPv6 into account in its Production System in early 2002. ZoneCheck, the AFNIC tool used for checking DNS zones configuration prior to their delegation under FR zone, was rewritten from scratch. ZoneCheckv2 (http://www.zonecheck.fr/) is a modular and extensible tool. It fully supports IPv6 today and will later support other extensions such as DNSsec ones.

Since April 2002, AFNIC has been giving **advanced IPv6 training course** with hands-on to part of its Registrars. This initiative has been extended since 2003 to the members of its "International College", an international committee including 13 NICs (Network Information Center).

AFNIC IPv6 team actively participates in several IETF (Internet Engineering Task Force) working-groups. Besides, its survey activity on IPv6-related technologies, the IPv6 team has acquired experience in running **inter-operability tests** jointly with 6WIND and other G6 partners, within the IETF protocol standardisation process.

AFNIC participation was also sought at different National and International IPv6-related events, such as RIPE (Réseaux IP Européens) meetings.

Finally a **collaboration project between AFNIC and Renater** on the one hand, and **Wide Project and JPRS from Japan** on the other hand, is being worked on. It will enable the French and Japanese teams to exchange experience in IPv6 and DNS fields.

Press Contact: Marine Chantreau - communication@afnic.fr
Technical Contact: Mohsen Souissi - ipv6tech@afnic.fr