IPv6 Activities and Results within Future Home

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IPv6 and Home Networking

- The base of technologies of the wireless IPv6 based home network included
  - IEEE802.11(a, b, g), Bluetooth, HiperLan2
  - IPv6
    - autoconfiguration
    - mobility support for IPv6
  - Interoperability
    - IPv4
    - UPnP
    - HAVi,
    - CAN
    - PLC
  - Ambient intelligence
    - rule based event handling

Key Achievements

- Wireless IPv6 home environment was established
  - IPv6 networking managed by the home server that is also connected to the external IPv6 network
    - network autoconfiguration is stable
  - working IPv6 stack implementations exist for different platforms
    - Linux (Red Hat, Debian, Familiar), MS Windows, PocketPC, Symbian

- Interoperability between IPv6 and other networking technologies
  - IPv4 (also UPnP between IPv4/IPv6), dual stack implementations
  - HAVi (Home Audio Video Initiative), HAVi/UPnP gateway
  - CAN (Car Area Network), Car Gateway
  - PLC, White Goods Gateway

Suggestions for effective IPv6 Deployment

- Start getting rid of NAT using IPv6
- Bringing in the dual operational IP networks
  - utilisation of the already working IPv4/IPv6 dual stack implementations in the terminals and networks
- Implementation of applications and application protocols (e.g. UPnP) to support IPv6
- Provisioning of services that bring added value for the home users
  - intelligent networked appliances
  - external services