Satellite Local Loop using UDLR

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Virginie Fainéant - FTR&D/DMR/SRS

Agenda

- Objectives of the architecture
- Architecture presentation
- Why using UDLR/LL Tunnelling Mechanism ?
- Road Map

Objectives

Satellite Broadband Internet Access :

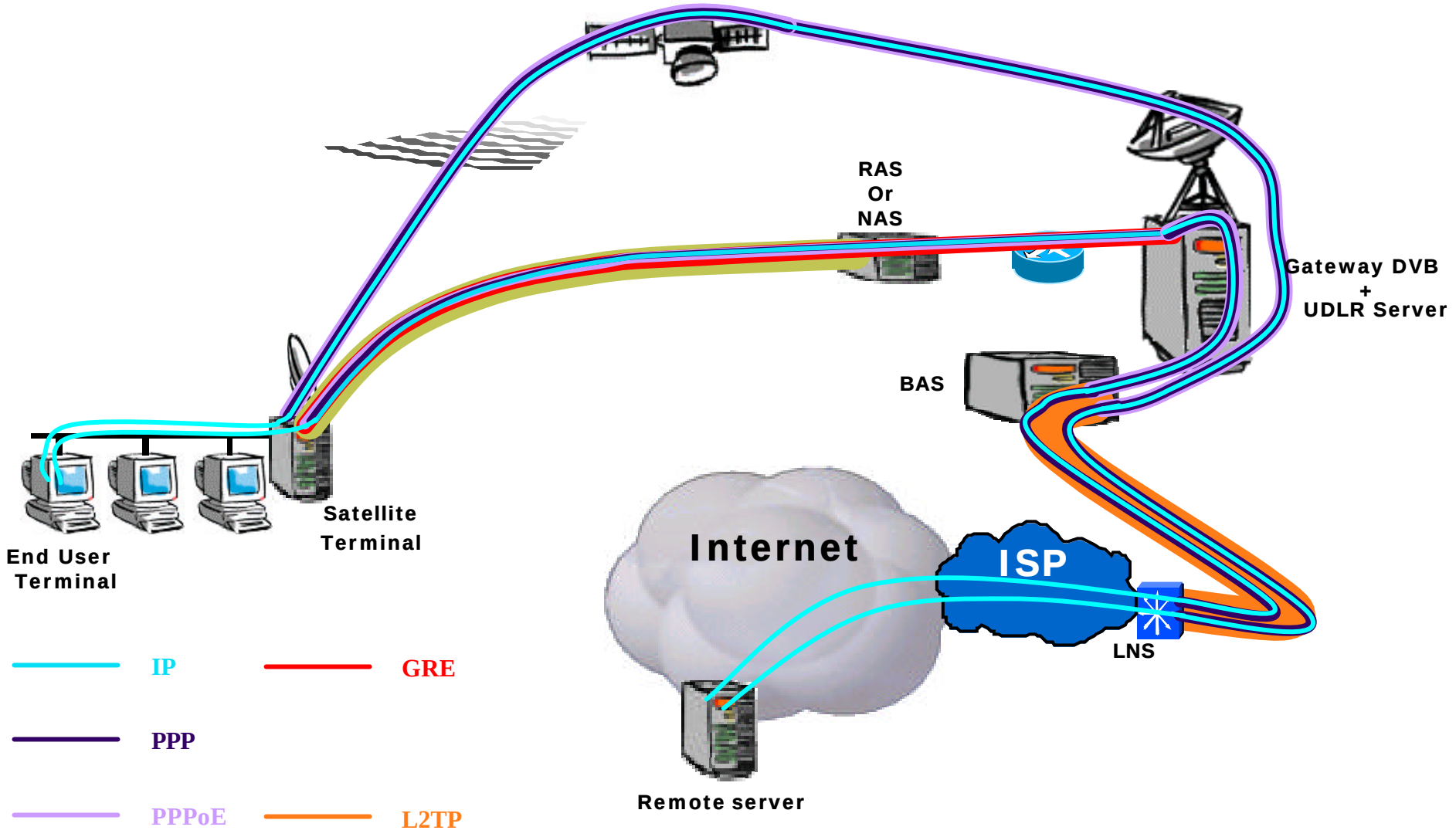
128 kbps (return channel), 512 kbps

- Based on ADSL model
  - Multi ISP configuration
  - Re-use of the ADSL management system (accounting, billing, etc.)
- Return channel flexibility : satellite or terrestrial

Interconnection with a BAS (Broadband Access Server) :

PPP connection type for Unicast flows

Architecture



Why UDLR?

- Interconnection with a BAS (Broadband Access Server) :
  - Satellite bi-directional Layer 2 Connectivity
    - Convergence point directly connected to the BAS
    - PPPoE supported
- Return channel flexibility
  - Either satellite or terrestrial return channel can be used
  - Standby terrestrial link
- Compatibility with all IP world :
  - Important for multicast

Road Map

- Unicast :
  - Concept validation performed already at FTR&D laboratory
- Multicast Support :
  - Multicast offered by ISP : to be studied
    - Via the BAS without using PPPoE
  - Multicast directly connected through the Gateway : to be validated
- Experimentation
  - Third quarter of 2001 with a few tens of satellite terminals