

Time division multiply access for ordinary 802.11a/b/g/n equipment

NETSHe Lab Ltd. presents time division multiply access (TDMA) implementation for ordinary 802.11 a/b/g/n equipment

Time division multiply access for ordinary 802.11a/b/g/n equipment

Goal TDMA advantages in comparison with the CSMA/CA

- TDMA does not provide throughput degradation during the traffic and (or) amount of nodes increasing in the network
- Predicable latency

Time division multiply access for ordinary 802.11a/b/g/n equipment

TDMA is introduced for:

- Carrier's backhaul
- Access network
- Specialized network with latency / throughput sensetivity applications

Time division multiply access for ordinary 802.11a/b/g/n equipment

Implemented network topologies for TDMA:

- MESH-network
- Point to Point (P2P)
- Point to Multi Point (P2MP)

Time division multiply access for ordinary 802.11a/b/g/n equipment

Some valuable TDMA features:

- Configurable time-slot sizes in 40, 20, 10, 7 milliseconds
- 802.11n features are supported (except A-MPDU)
- Built-in A-MSDU (frame aggregation) implementation for all modes
- Adaptive bitrate and retransmission support.

Time division multiply access for ordinary 802.11a/b/g/n equipment

Some valuable TDMA features:

- Built-in frame compression
- Traffic encryption support
- 5/10/20/40 MHz channel widths for all modes
- Channel shifting with 1MHz step
- Batman_adv support

Time division multiply access for ordinary 802.11a/b/g/n equipment

Implementation details

- Implemented as an standard Linux wireless stack extension. Modified stack is fully backward compatible with unmodified stack. All wireless chips which are supported by ath5k, ath9k drivers, are supported too. TDMA support for any wireless chip which has drivers for mac80211 stack is possible.
- Fresh compat-wireless is used to provide compatibility with variety kernels.

Time division multiply access for ordinary 802.11a/b/g/n equipment

Licensing:

NETSHe Lab Ltd. offers flexible licenses for TDMA:

- Source codes of modified compat-wireless
- Wireless drivers and stack in a binary form for the specified Linux kernel version.
- Custom firmwares (with NETSHe)

Time division multiply access for ordinary 802.11a/b/g/n
equipment

Want to know more?

Contact us by email info@stasoft.net

or call +7 (4852) 90-89-30