MENOS Applications

Broadband Access

MENOS Hub & Noc

Archive

MMX-Hub

INTRANET

VPN

INTERNET

SIT

SIT

VPN access
File transfer
Intranet access
Archive access
VoIP
Capacity booking
Collaboration
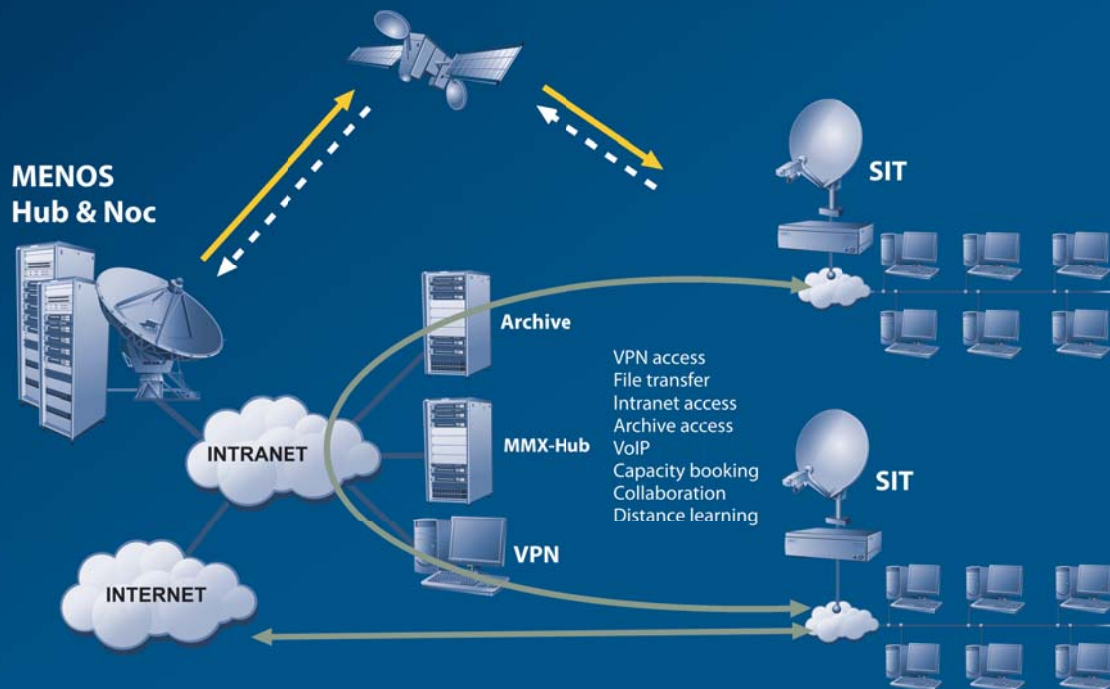Distance learning

---

All MENOS Satellite Interactive Terminals (SIT) are equipped with a common satellite broadband access part, so all users have access to a shared high speed Wide Area Network (WAN) and benefit from high performance application portals within their community.

The common broadband access part in every terminal allows applications such as:

- Intranet and internet access
- IP multicast for content delivery
- File transfer of content to different locations
- E-mail exchange
- Teleconference and distance education

When MENOS is used for multimedia exchange, such as television or radio contribution and distribution, the broadband part of the network allows remote users to choose the optimal method for delivering their content to other users in the network, make the necessary capacity reservations and control the access to the media content. Access to the central media archiving server is also possible over the air. Thanks to the broadband access subsystem of MENOS, these various control and monitoring functions are all available on web-based interfaces throughout the MENOS network. Moreover, the broadband network allows the users to communicate from one remote location to another, enabling voice and data coordination channels or live interactivity between the creator of the content and its end user.

Key features

- High speed internet / intranet access
- Unicast and Multicast traffic
- Acceleration of traffic
- Data/audio/video file transfer
- Integrated encryption on all sessions and data
- Billing of consumed traffic & VoIP calls.
- Local and Central Archiving
- Support for real-time traffic for VoIP telephone calls and live audio contribution

Key Benefits

- Always on, true broadband experience
- Cost effective exchange of data, voice, audio and video
- Efficient reservation of live or archived radio & video feeds

Key Services

- IP connectivity
- VPN connectivity
- VoIP telephony
- Distance learning & Collaboration

Newtec

SHAPING THE FUTURE OF SATELLITE COMMUNICATIONS

www.newtec.eu

Technical description

IP connectivity

IP connectivity allows the end-user to benefit from always-on high-speed satellite internet access, supporting a broad range of IP services, such as web browsing, e-mail, chat, FTP, Telnet …

Whether the user is a broadcaster, the operator of a mobile unit, a journalist in the field, a technician in a TV station or anybody else, several applications can be envisaged:

- Basic web browsing
- Transfer files between locations without reservation of capacity
    - Store video or audio files
    - Retrieve video or audio files for local editing
    - Transfer files between locations
- Reserve capacity using the web based capacity reservation system for live or archived audio and video feed generation
- Chat with members of the team on different locations to synchronise on events.
- Exchange e-mail from any location, at anytime.

VPN service

Professional users have the ability to create Virtual Private Network (VPN) connections between locations to allow secured access to and exchange of private data. The VPN's are implemented by the tunnel mode IPSec Internet standard, encrypting and authenticating the entire IP packet contents for maximal security.

By using a VPN service the user can securely access important resources provided by his organisation:
- Secure e-mail
- Secure web-services, like intranet.
- Secure access to TV/Radio archives
- Secure file transfer between locations without reservation of capacity
    - Store video or audio files
    - Retrieve video or audio files for local editing

Collaboration Service

Collaboration Services allow the creation of sessions with audio, video and data sharing for applications such as distance learning, sales and customer training, engineering discussion etc.

The following collaboration applications examples can be envisioned within the MENOS concept:

1) A scheduled session with a few or up to hundreds of people listening to a teacher/trainer with limited voice only interactivity:
   Teacher/Trainer lectures in "classroom" and has presentations on his/her PC and a large number of students follow the lecture passively on computers with projectors/speakers with limited voice interaction.
2) Interactive training/teaching session with limited number of participants allowed fully interactivity (voice, video, data) and the rest of the individuals passively watching with limited voice participation:
   Trainer/teacher presenting/annotating on a whiteboard and a limited number of trainees/students allowed to also manipulate content at the teacher's site and interact with teacher via video and audio and the rest of the students following passively with limited voice interactivity.

Voice over IP service

The availability of high quality VoIP coordination channels in each MENOS terminal facilitates the daily operations and reduces significantly the communication cost while consuming very little satellite bandwidth.

Live Radio service

With the MENOS Radio SIT, radio stations can exchange live or recorded digital radio programs. The broadband access services allows for easy web-based reservations for live audio feeds. Similarly, live radio content can be distributed with high quality through the cost-efficient and always available multicast streaming capability of the broadband access service of the MENOS terminal.

Live TV service

The broadband access services available in each MENOS terminal allows for easy web-based reservations for live video feeds. Another use of the broadband access service of the MENOS terminals, is that video content can be distributed through cost-efficient multicast streaming, which can be captured and stored on the MENOS terminal in local storage for screening at a later time. A separate document is available describing this service in detail.