

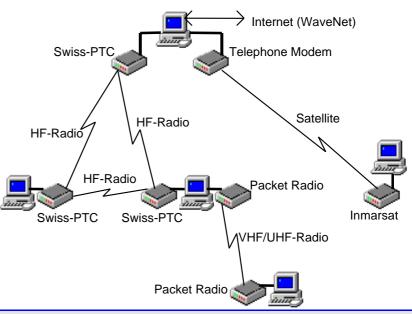
WaveMail

a complete e-mail system optimized for radio and satellite links

SCHUEMPERLIN ENGINEERING AG

DESCRIPTION

- WaveMail is a complete e-mail system.
- WaveMail is optimized for use over relatively slow links like radio-links (Pactor / Packet radio), Inmarsat, Thuraya, Iridium and telephone lines. In order to use slow links in an efficient manner, all messages are compressed and a very efficient protocol is used for message transfer (compression and decompression is done automatically without user intervention).
- WaveMail has all the functions needed to create, send, read, forward, reply and manage messages. Files of any type (e.g. spreadsheets, graphics, text...) can easily be attached using a file-dialog or drag-anddrop function. Messages can be addressed to several recipients and delivery notifications can be requested.



A small WaveMail network

BENEFITS

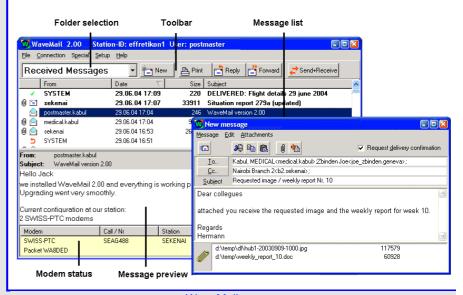
- save money by using radio links
- · make efficient use of satellite links
- · easy reliable messaging
- Internet access from remote locations
- · easy to learn, easy to use

FEATURES

 message transfer over many physical links

Radio-links HF/VHF/UHF (SWISS-PTC Pactor, Packet Radio), Satphones (Inmarsat, Thuraya, Iridium), Telephone lines

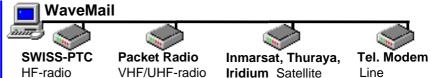
- optimized for radio links
 automatic message compression, efficient
 protocol, automatic resume
- very easy to use
- · powerful message routing
- · simultanous connections
- flexible and easy configuration
- · Transceiver control
- LAN operation, individual usernames
- WaveNet, Internet Gateway (SMTP/POP3)



WaveMail screen

MODEMS

- SWISS-PTC / SWISS-PTC II Pactor
- Packet Radio Modem
- Inmarsat, Thuraya, Iridium
- Telephone Modem



WaveMail is a complete e-mail system

WaveMail includes all the functionality needed to

- 1. create, send, receive and manage messages
- 2. route/forward messages to their destinations
- 3. deliver messages to the addressed recipients
- 4. handle communications over modems

In ordinary e-mail systems these 4 main functions are often known as Client, Router, Postoffice, and Remote Server.

WaveMail is optimized for radio links and satellite links

Radio links tend to be relatively slow. To cope with this handicap, **WaveMail compresses data** to be transferred in an efficient way and transfers messages and attachements with a **minimum of overhead**. After a link fails during a message transfer, WaveMail **resumes** the transfer at the point where the connection was lost, this prevents from repeating the same data over and over. On satellite links the round-trip-delays are rather long. Therefore it is important that an efficient protocol is used over such channels. WaveMail uses a streaming protocol. The streaming protocol is reliable and efficient. Efficient use of the communications channel saves money.

WaveMail is extremely easy to use

WaveMail has an extremely easy to use human interface. All the necessary and convenient functions for routine operation are available. WaveMail is not overloaded with fancy functions that are rather confusing than useful.

WaveMail communicates over various physical links

WaveMail supports Swiss-PTC-Pactor modems, Packet-Radio modems, Inmarsat-Mini-M/M/B, Thuraya, Iridium, TCP/IP-links and telephone modems. Due to its modular structure, WaveMail can be adapted to other special modems.

WaveMail allows easy attachment of binary files

Transferring binary files is very easy with WaveMail. Use the mouse to attach the desired files to a text message. Any type of files can be attached. On the receiving side, the attachements can be opened/run or saved by a mouse click.

Usernames / LAN-operation

Messages can be addressed to individual persons on a station. The users on a station can send/receive messages from their workstation on a LAN or directly on the WaveMail PC which is connected to the modems.

WaveMail works in a highly automated way

WaveMail can be configured to automatically exchange mail between stations at certain intervals, at certain times of the day or when messages are queued. It is also possible to initiate the exchange of mail manually.

WaveMail has powerful routing features

WaveMail handles fully automatic message forwarding. The sender of a message just selects the recipient(s) from his addressbook. Wavemail takes care of forwarding the messages, independent of whether the recipients station(s) can be reached directly or whether the message is delivered via other stations. A single message can be sent to several recipients.

WaveMail handles several modems on the same PC

Up to 7 modems can be handled by a single WaveMail station. Any mixture of modem types is possible. As an example, a station might use 2 Swiss-PTC HF-modems, one Packet-Radio modem and an AT-Hayes type telephone modem, all on the same PC.

Delivery-notifications and non-delivery-notifications

When composing a message, an optional delivery confirmation can be requested. After delivery of the message, the sender will receive a delivery report for every recipient. Non-delivery-notifications are always automatically created (e.g. wrong address).

WaveMail allows on-line person-to-person dialog

In addition to normal mailing, WaveMail allows online discussions (chatting) between two stations.

GLPLUS / RLPLUS

WaveMail can exchange messages with stations that use GLPLUS or RLPLUS software. This may help during the transition from a GLPLUS to a WaveMail network.

WaveNet, gateway to the Internet (and other mail systems)

The WaveNet Internet gateway (SMTP / POP3) allows the integration of WaveMail with the world wide Internet. This also allows easy integration of WaveMail with many other e-mail systems, as most e-mail systems offer an Internet gateway. The Internet gateway is a separate software. It only needs to be installed at one station within a WaveMail network.

User Interface

E-mail user interface (similar to popular e-mail programs)

- create/send/receive/read/forward/reply messages
- add/save/open/run attachments
- manage messages (folders)
- address book
- LAN operation possible

Message routing

- automatic message routing (store and forward)
- multiple addresses
- distributed routing information

System requirements

- PC with Windows 95, 98, NT 4.0, 2000, XP

Transmissions

- SWISS-PTC (HF-Pactor), VHF/UHF-Packet, AT type modem (telephone/Inmarsat/Thuraya/Iridium), TCP/IP-links
- automatic transmission (send receive msgs), no user intervention necessary
- all messages and attachments are automatically compressed
- resume after interrupted transfers
- link between stations can be protected by a password
- scheduled or manual connections
- chat mode for online discussions
- GLPLUS/RLPLUS compatible

WaveNet SMTP / POP3 Gateway

- transfer messages between WaveMail and Internet
- dial-up or permanent TCP/IP connection
- scheduled exchange of messages
- handles RFC822 and MIME
- address translation
- individual send/receive rights

SCHUEMPERLIN ENGINEERING AG Moosburgstr. 2 CH-8307 Effretikon Switzerland Phone: +41 52 355 1660
Fax: +41 52 355 1666
E-mail: info@schuemperlin.com
Web: www.schuemperlin.com