RC66 Combat Communication Suite

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The AT Communication International RC66 Combat Communications Suite simplifies setting up a high frequenc (HF) network by seamlessly integrating Internet and HF e-mail. Compatible with standard e-mail applications such as Microsoft Outlook™ the RC66 enables sending and receiving e-mails efficiently and reliably over HF radio links and the Internet and confirms the success/fail of HF e-mail transmission via confirmation e-mails.

RC66 contains a STANAG 5066 ARQ protocol stack that provides interoperable, networked, error-free and efficient communication over HF radio links and is interoperable witl STANAG 5066 e-mail clients of other leading vendors.

Features

HF e-mail standards

- ☑ STANAG 5066 Annex F
- ☑ CFTP Client (Compressed mail)
- ☑ HMTP Client

Internet e-mail

- ☑ Microsoft Outlook™ Compatible
- ☑ SMTP, RFC 2821

ARQ Data Protocol

- ☑ STANAG 5066 protocol V1.2
- ☑ Automatic Data Rate Change
- ☑ Automatic Link Maintenance
- ☑ Interoperable with S5066
- ☑ Compliant Implementations

Platforms

- ☑ Windows™ 2000, and XP

Secure Over-the- Air (OTA) Transmissions
AT Communication ©

- ☑ Crypto Support
- ☑ ALE Linking Protection
- ☑ RM6A Security Processor

Prioritization of E-mails

The RC66 increases throughput by means of RFC 1952 standardized compression as mandated by STANAG 5066 Anne F (CFTP), which supports prioritization of e-mails, sending higher priority e-mail first. Should the transmission of an e-mai be interrupted or preempted by a higher priority e-mail, the interrupted e-mail will be resumed at an appropriate time.

Maximization of Signal and Link Quality over ALE

As an option, the RC66 enables multi-frequency operation via the optional RM6A ALE modem.

RC66 continually maximizes throughput by monitoring the signal quality and adjusting the data rate in accordance with th link quality. If the radio channel is no longer viable for communication the ALE is used to select a different channel for continued communication (ALM channel change).

RC66 GUI Features

- ☑ Assisted Network Configuration
- ☑ E-mail delete/re-prioritize
- ☑ E-mail throughput/utilization
- ☑ Channel status (SNR, BER)
- ☑ Radio status, S-meter, VSWR

Caption: The RC66 GUI assists the HF Network Administrator to define a hierarchical HF Network layout without complexities associated with ALE and STANAG 5066. The RC66 allows HF Network configuration to be updated when new nodes are added or removed.

Operational Modes

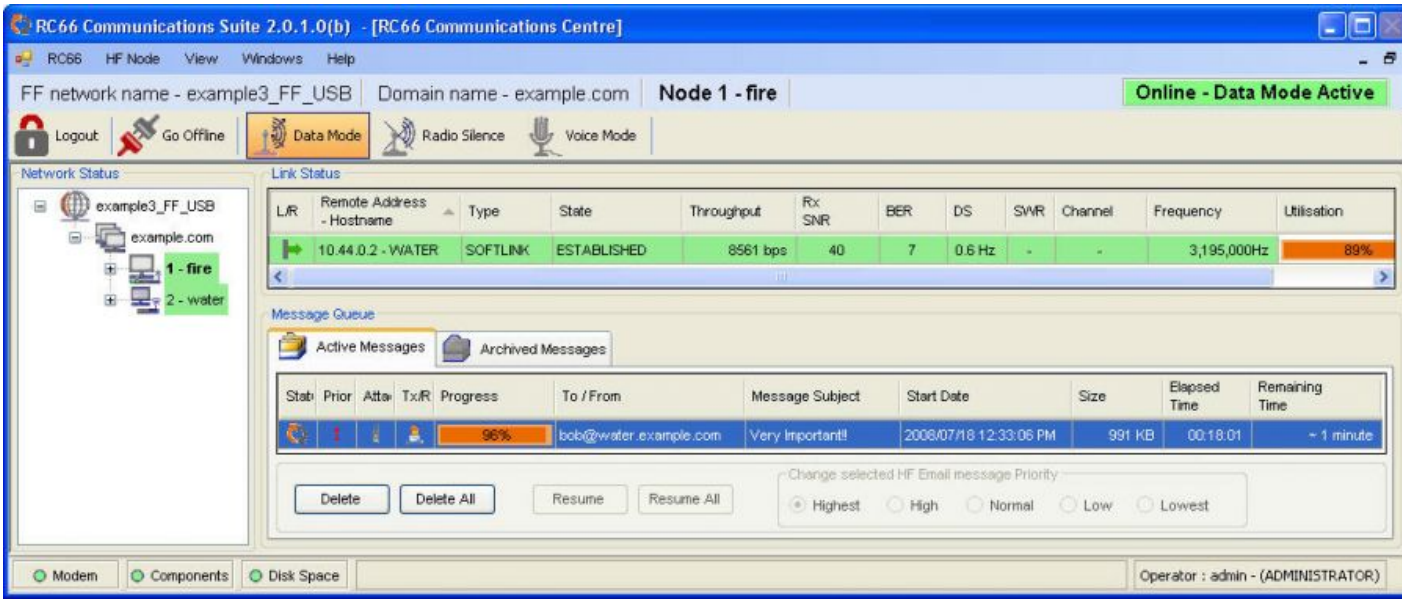
The RC66 structures status information to allow the user to pinpoint faults, failures and inefficiencies in the HF Network.

Features:

- ☑ ARQ Mode
- ☑ Broadcast Mode
- ☑ Voice Mode
- ☑ Radio Silence Mode

Voice or Data Selection

The RC66 gives the user complete control to use the radio for data or voice transmission as required by the user; it has the ability to sense the PTT signal allowing the RC66 to automatically stop data transmission when the user uses the radi for voice transmission.



RC66 Combat Communications Suite GUI

CATEGORY	CAPABILITY
Data Link Protocolos	STANAG 5066 (Annex A, B, C)
STANAG 5066 Stack	ALE (MIL-STD-188-110B Appendix D, E) ALM (Automatic Link Maintenance) DRC (Data Rate Change) ARQ (Automatic Repeat on Request) and Non-ARQ mode Radio Silence mode Supports 2ISB Collision Avoidance and Recovery
Security	End-end email encryption support (S/MIME, PGP) External Crypto support
Network Planning	Network wide 5066/ALE Addressing

& Configuration	HF frequency planning & selection Hardware configuration HF Network reconfiguration Only authorized configuration changes
HF Messaging Clients	CFTP: Compressed File Transfer Protocol (STANAG 5066, Annex F) PCFTP: Priority CFTP BCFTP: Broadcast CFTP HMTP: HF Mail Transfer Protocol (STANAG 5066, Annex F) BHMTP: Broadcast HMTP
LAN Email Clients	POP3 (RFC 1939, excluding APOP) SMTP (RFC 2821, excluding authentication)
HF Message Management	Message resumption (CFTP) Message grouping to destination Priority-based message queuing Message filtering Store & forward Message delivery status notification
Modem Interfaces	*RM-SC Synchronous PCI Card* Data (DTE): Synchronous/Asynchronous, RS 232/422/423 Modem control (REM CTRL): Asynchronous, RS 232/422
HF Modems	RM6 HF Modem & ALE Controller Supports MIL-STD-188-141A (ALE), ALE Linking Protection (LP) & Occupancy Detection Waveforms: MIL-STD-188-110B MIL-STD-188-110A MIL-STD-188-110 ACF (2ISB) STANAG 4539 STANAG 4285 (only for non-ARQ) STANAG 4529 (only for non-ARQ)

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