



ROSETTA TECHNOLOGY®

OPTIMIZE SITUATIONAL AWARENESS

Multiple platforms and clients for a true common operational picture

From radars and sensors to networks and software applications, the proliferation of technological platforms poses a challenge for effective, real-time information exchange. Collins Aerospace Rosetta Technology® data translation and forwarding engine enables optimal situational awareness by harnessing the full potential of data flow in tactical and strategic environments.

With Collins Rosetta Technology, multiple clients can participate with multiple datalinks from which Rosetta is receiving information. Rosetta's interfaces, sensors, datalink hardware and software clients accept, translate and forward normalized

data traffic from over fifty-two datalinks to clients in the formats they need.

Rosetta can be used in Microsoft Windows® environments and Docker-based containers on Linux to provide near real-time data handling and management in deployed settings from tablets to ESXi-based solutions. A robust SQL-like language enables granular client interaction with individual datalink messages or with broad filtration.

Using a text-based, no-code language processor, Rosetta enables users to modify forwarding rules, Interface Control Documents (ICDs) and other files via Vim or Notepad. This provides users the opportunity to adjust specifications or network topology for changing tactical situations, and enables inclusion of new datalinks for translation and forwarding within a few hours.

KEY FEATURES & BENEFITS

- Net-centric Enterprise Service (NCES)
- Supports data acquisition from a variety of sources
- Real-time in-RAM data store (5000 tracks per second)
- Message-by-message translation and forwarding
- Selective forwarding per message type or classification
- Data normalization in the data structure
- Data recording and playback for after action analysis
- Units of measure management and translation
- Geographic reference frame conversion

Rosetta Technology provides datalink integration capabilities for the following message formats and interfaces:

Low-level interfaces

- LINK16 Platform I, J
- Ethernet (TCP/IP, UDP/IP)
- Synch serial
- Async serial
- FPGA-based modems
- Aeronix, Elbit modems

Protocols

- MIL-STD-6016
- MIL-STD-6017
- MIL-STD-6022
- MIL-STD-3011A/C (JREAP-A/JREAP-C)
- MIL-STD-6020 forwarding
- MIL-STD-6090 Cursor-on-Target (XML)
- MIL-STD-188-220
- MIL-STD-2045-47001
- Air Force Application Protocol Development (AFAPD)

- Collins Aerospace slowlink forwarding protocol
- USAF TACP gateway special forwarding for close-air support
- Finland country wide infrastructure forwarding
- Swedish air-to-ground forwarding
- German field artillery ground-to-air forwarding
- KC-135 intelligent gateway
- USMC Network on the Move

Hardware

- MIDS family of LINK16 terminals
- TTR/STT small form factor LINK16 terminals
- PRC-161 handheld LINK16
- TTNT
- SCISR BE-CDL
- PRC style radios
- Wideband HF/HF cellular
- Radios with MUOS
- Mesh (Wave Relay, Trellis, Silvus)

Clients

- Display using Falconview Map
- Display using Kongsburg Gallium Map
- Display using Luciad mapping
- ESRI map
- Client to AFATDS
- Client to ADOCS/JADOCS
- Client to CPCE

Message interoperability with combat platforms

- A-10 SADL and VMF
- F-16 IDM and LINK16
- F-15 LINK16
- F-35 VMF and LINK16
- B52 VMF and LINK16
- F/A-18 VMF and LINK16
- Apache LINK16

Specifications subject to change without notice.



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