

JOINT RANGE EXTENSION (JRE)

The Premier Tactical Data Link C2 Gateway

On The Horizon Update (JRE Version 8)

As part of a version update, the Joint Range Extension has integrated Cursor-on-Target (CoT) and Tactical Assault Kit (TAK) capabilities into the core JRE software. This provides warfighters with unprecedented data control while operating in multiple disparate CoT/TAK mesh networks simultaneously, sharing, forwarding, or bridging the networks depending on user needs.

Full Cursor-On-Target & Tactical Assault Kit Integration

Warfighters now have unprecedented control of their Cursor-On-Target (CoT) data with the ability to filter both transmitted and received data. A robust set of tools allows operators to control data by source and destination to ensure the Commander's Information Exchange Requirements are met. The JRE software does not require any additional software or plug-ins to operate as a Tactical Assault Kit (TAK) node or within the CoT environment. This allows users to simultaneously operate in multiple Tactical Data Link (TDL) environments concurrently.

Cursor-On-Target Multi-Mesh Technology

The JRE CoT Multi-Mesh (CMM) functionality allows users to forward (One-Way) or exchange (Two-Way) CoT/TAK data between multiple disparate CoT/TAK Mesh networks and multicast groups. This allows a host system to manage, control, and filter CoT/TAK data as required by Information Exchange Requirements (IER) from multiple networks simultaneously. The JRE can also process and translate other TDLs as configured.





Cursor-On-Target Interface Bridging

The CoT Interface Bridging functionality allows users to forward (One-Way) or exchange (Two-Way) CoT/TAK data from one ethernet interface to another. This allows a host system to operate in one network while sharing or forwarding only CoT/TAK data with an external network. The JRE still processes and translates TDLs as configured.

Sneak Peak

Below is a snapshot of a working menu for the CoT/TAK integration. The initial build will allow Warfighters to filter by Source, Destination, Category, and Identity with ease.



FIG 1. CoT/TAK Filtering Table

Recent Success

SAIC's Joint Range Extension (JRE) Team recently participated in Experimental Demonstration Gateway Event 23 (EDGE 23) at U.S. Army Yuma Proving Ground, Arizona, which tested the Army's Future Attack Reconnaissance Aircraft (FARA) and Future Vertical Lift (FVL) capabilities, while assisting the Army develop and refine its Aerial Tier Network.

The JRE software provided robust tactical data link gateway and data forwarding capabilities at the tactical edge aboard Kraus Hamdani Aerospace K1000 Unmanned Aerial Systems (UAS). JRE fused internal K1000 Cursor-on-Target (CoT) data with CoT data received from the TSM Mesh network and forwarded select data to other network participants who would've otherwise been geographically separated from the rest of the force. The event was a huge success facilitated by the Joint Range Extension software.

For More Information: https://www.saic.com/jre

