



WHITEPAPER

ENHANCED COLLABORATION IN COMPLEX MISSION THEATRES

Secure, federated persistent chat

Background

As we are seeing in Eastern Europe, the requirement for western defence and intelligence communities to conduct coalition operations, at very short notice, has placed the spotlight on enhanced collaboration in complex mission environments.

Central to success is to ensure information can be shared confidentially, without loss of integrity and under variable communications conditions, between coalition partners at every level of command. The delivery of accessible and accurate data is the cornerstone of timely decision-making by military commanders and intelligence experts from day zero. MindLink® is the key enabler that delivers the information assurance necessary for decisions to be made by the right people, in the right place, at the right moment.

Highly classified federated environments have specific and unique security challenges that extant solutions leave unanswered. These challenges include data ownership, defining groups of users across participating organisations, managing sensitive content and controlling its dissemination, providing end-to-end encryption and preventing data leakage (outside of any organisation).

Addressing these challenges

Over the last 5 years MindLink® has worked closely with the UK and US Intelligence Communities to identify solutions to meet this requirement. As a result, MindLink® has developed a deep understanding of the information assurance challenges faced by inter-agency teams and coalition partners, across both defence and national security. Solving the complex and unique challenges of real-time communication within future complex mission theatres is at the heart of MindLink®'s federated persistent communications solution.

The complex and specific needs of defence and national security organisations sharing highly classified material required a close working relationship to deliver the right solution for users. As a result of our detailed research with our customers, we identified several barriers to enhanced collaboration under these conditions. These included siloed legacy communications channels that prevented real-time decision making, conflicts with national data handling procedures for highly sensitive data, fragmented identity models leading to poor user experience, inefficient and insecure permissions and rights mechanisms and, finally, a lack of suitable information security techniques.



MindLink® argues that, whilst real time collaboration is the answer to mission success between coalition partners, an innovative step-change was required to deliver such a capability that is both optimal for users and protects data from spillage or compromise by external and internal actors.

Our solution

To meet these challenges, funded by Defence and Security Accelerator (DASA) investment over 2022/23, MindLink® has developed its Federated Persistent Chat capability, underpinned by the new “FRNIX” (Federated Real-time Need-to-know Information eXchange Protocol). The solution supports multi-domain, wide-area connectivity using native security mechanisms, as evangelised by the 5 Eyes intelligence community, with the following key features:

- Frictionless real-time communication across organisations under DDIL constraints;
- Multi-layered, multi-faceted security controls based on intelligence community standards;
- An integrated identity model based on confidential entitlements;
- A unified user experience in mixed/multi-classification environments;
- Embedded state-of-the-art information security techniques.

Building on MindLink®'s existing Chat Engine (MCE) already deployed within the UK and US IC, our best-in-class data-centric chat system will enable defence and intelligence communities to replace legacy and incompatible solutions (e.g., email) with a next generation Federated Persistent Chat backbone. The existing and unique information security and management concerns have been addressed through innovative built-in, multi-layered, and multi-faceted security controls.

MindLink®'s FRNIX protocol architecture enables effective sharing of highly sensitive information between coalition partners, whilst simultaneously ensuring data confidentiality, integrity, availability, dissemination and governance, essential components for timely and accurate decision-making by defence commanders and intelligence officers across complex mission environments.

Summary

Developed in conjunction with the US and UK Intelligence Community and currently deployed in some of the most secure environments in the world, MindLink®'s next generation secure, federated persistent chat protocol ("FRNIX") delivers a platform that enables effective and assured mission-focused collaboration between organisations operating in exceptionally classified scenarios.



For more information or inquiries please visit: mindlinksoft.com