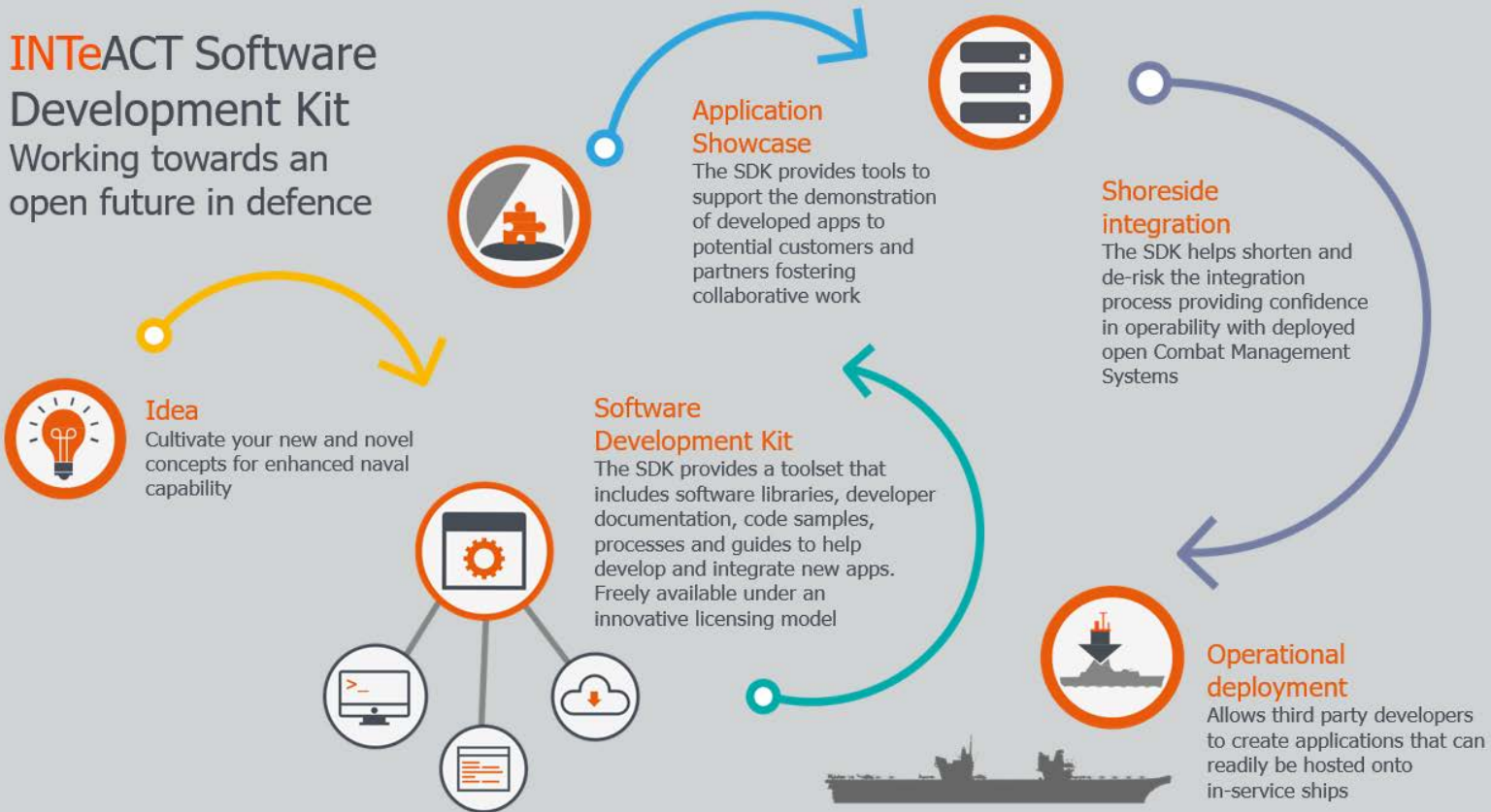


The Source

Issue 5, October 2022

INTeACT Software Development Kit

Working towards an open future in defence



Delivers an open approach that meets the needs of the Royal Navy's vision for future Combat Systems

inteactsdk@baesystems.com

Welcome to the fifth issue of **The Source**, the definitive place to find the latest information on the **INTeACT** Software Development Kit (SDK).

The Source newsletter keeps you updated on all the news, releases and upcoming events as well as providing highlights of the feedback and experiences from across the community of using the **INTeACT** SDK.

The Source is up-issued periodically as and when we have an update to provide and ensures that the **INTeACT** SDK community can stay connected with all the new developments as they are released.

If you'd like to get in touch to share your own experiences, raise a question, make a suggestion or simply tell us what you think about the SDK then please send us an email at: inteactsdk@baesystems.com.



INTeACT

BAE Systems is a leading supplier and integrator of Combat Management Systems and **INTeACT** is the name of our next generation CMS.

It uses open systems architectures to ensure that state-of-the-art technologies can be adopted quickly to enhance overall ship capability and provide unrivalled information superiority.

INTeACT provides warship crews with all the information they need to track, analyse and respond to threats, as well as the ability to coordinate resources in other operations such as intelligence gathering and humanitarian assistance, both independently or as part of a multinational coalition.

Programme Update

Following the success of the INTeACT SDK Codeathon, on-going support is being provided to a number of the companies who attended. BAE Systems is working with Masters of Pie; Decision Lab and Nquiring Minds to support the showcase of their ideas using the SDK.



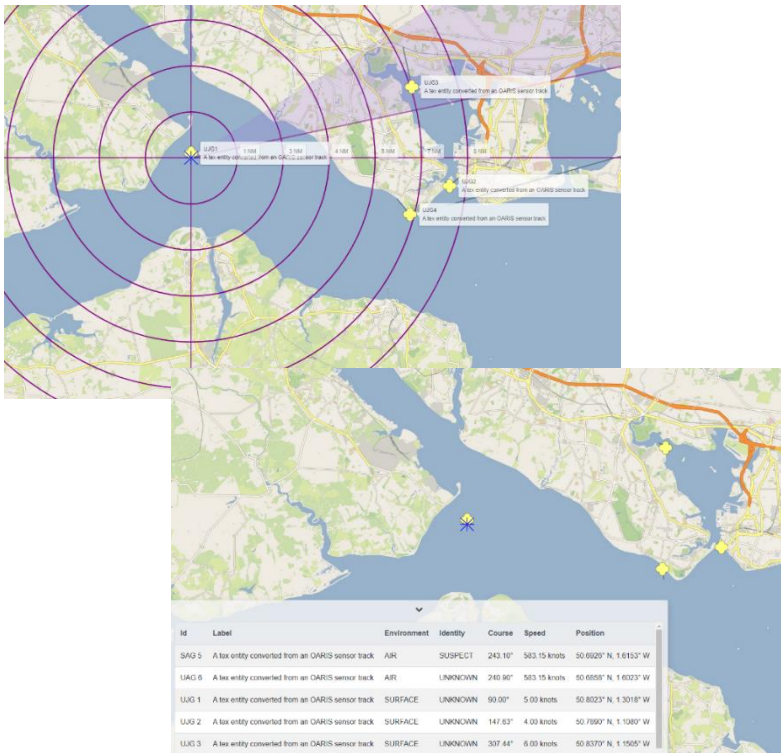
Support to other Codeathon participants or to any other parties interested in the SDK can be requested via the SDK mailbox.

Finally, we are pleased to announce that the next release (v2.2) of the SDK is now available to registered users to download from our hosting site.

INTeACT SDK v2.2

This release introduces:

- Updates to support Python 3.9
- Updates to support Java 17
- Performance and visualisation upgrades to the Labelled Plan Display (LPD)
- Per-waypoint height support in Scenarios and the Scenario Editor
- Improvement to the ALMAS Alert Management
- All the latest bug fixes, including some found and patched during the Codeathon



If you are not yet a registered user and would like to get access to the SDK you will need to email the SDK mailbox at inteactsdk@baesystems.com indicating your interest.

The INTeACT Software Development Kit (SDK)

The SDK offers open interfaces and emulation tools allowing software engineers to develop their own applications that can integrate with open combat management systems such as **INTeACT**.

Initially aimed at applications dealing with tactical picture visualisation, track correlation and track identity recommendations, the SDK consists of a collection of open interfaces and components supported by tutorials and API documentation.

The open standards (as defined by the Object Management Group (OMG)) interfaces provided by the **INTeACT** SDK include OARIS (Open Architecture Radar Interface Standard), TACSIT (Tactical Situation Specification/TACSIT Data Exchange (TEX)) and ALMAS (Alert Management Service). More information can be found on these open interfaces on the OMG web site <https://www.omg.org/>.

The **INTeACT** SDK utilises GraphQL and the Data Distribution Standard (DDS) as its data and message exchange mechanism, maintaining commonality of approach with the Royal Navy's NELSON data exploitation programme.

The **INTeACT** SDK provides a number of applications and services including:

- Data Service: uses an HTTP Server to store and distribute data between components
- Combat System Track Service: provides a consolidated view from multiple sensors and decision aids
- Combat System Picture Correlation App: determines whether tracks from different sensors correspond to the same object
- Geodesy Service: provides utilities for doing calculations in real-world coordinates
- Display Console: provides a plan display based on content from the Combat System Track Service
- Real World Scenario Simulator: provides a Graphical User Interface (GUI) for crafting scenarios based on the motion of objects in the real-world

Access to the SDK is facilitated by the use of an innovative, free to use, open defence licencing model. Third parties wishing to exploit the opportunities offered by the **INTeACT** SDK are required to sign-up to this licencing model before receiving the SDK.

Get in Touch

If you would like to ask any questions about the **INTeACT** SDK or discuss how it might be useful to you and your business then please get in touch at: inteactsdk@baesystems.com

We want to ensure that we keep the lines of communication open, so please do contact us using our email address if you want to share ideas or comments with our team.

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