Development & Integration
Leveraging the power of Systematic software
Enabling interoperability

Achieving interoperability is a key issue for any software developer or systems integrator. It’s a complex challenge that requires experience and often years of development and testing. Systematic’s range of software products provide a set of robust building blocks which are specifically designed to achieve interoperability in development projects and systems integration.
SitaWare Suite

The software in the SitaWare suite constitutes a fully scalable C2 solution, designed to cover most needs right off-the-shelf. On account of its open architecture and compliance with international standards for interoperability, components from the SitaWare suite can quickly be integrated with other systems and specialist technologies. This enables software developers to take advantage of the interoperability engine that drives one of the market’s most successful C2 systems.

SitaWare products comply with the MIP (Multilateral Interoperability Programme) standard, the most widely adopted standard for military data exchange. This makes them the ideal backbone for future-compatible information management systems for both military and civil defence organisations.

IRIS Suite

The IRIS software framework is used by more than 100,000 users in over 40 countries in their C2 and military message handling systems (MMHS) for working with formatted messages. The software has become the de facto standard in NATO member countries for military messaging.

Communication based on the Message Text Format (MTF) is the most widely used path to military interoperability. The IRIS suite of software products ensures full, consistent compliance with the constantly evolving NATO ADatP-3 and USMTF standards. This ensures the best possible interoperability and accurate communication.
SitaWare’s open architecture and adherence to international interoperability standards means that it can be rapidly integrated with many other C2 systems and specialist technologies.

**SitaWare Headquarters C2 Server**
- Powerful C2 Framework
- SOA architecture
- Well documented open APIs

SitaWare Headquarters C2 Server is a rapidly deployable, off-the-shelf enabler for building C2 applications. It is the fastest way to implement support for MIP Baseline 2 and MIP Baseline 3.0, even concurrently, and integrates smoothly with off-the-shelf products from many different suppliers to support additional interoperability standards, including ADatP-3 (STANAG 5500), NFFI (STANAG 5527), OTHT GOLD (US), Link 16 (J-series) and AIS.

Based on the principles of Service Oriented Architecture, users can develop custom C2 applications specific to their needs and requirements with SitaWare Headquarters C2 Server Web Services, for instance to build and display a single unified Common Operational Picture.

The SitaWare Headquarters C2 Server is also available with SitaWare MIP Replication for sharing operational data with partner nations using the MIP DEM standard and, of course, it works easily alongside other SitaWare C2 products.

**SitaWare Headquarters Track Server**
- Powerful REST interface
- Exceptional data transformation
- Supports thousands of tracks

The SitaWare Headquarters Track Server enables the efficient exchange of unit information between disparate systems. Via its numerous interfaces and supported protocols it provides an open platform for managing and converting track data and other C2 information, which makes for straightforward integration with many specialist and legacy installations.

It tracks positions of air, land and maritime assets via data feeds (including Link 16-Simple J, AIS, OTHT-GOLD and NFFI) and automatically extracts MIP-compliant data for use in plans, orders and reports.

With minimal hardware requirements, a small footprint and runtime demands, SitaWare Headquarters Track Server is easily deployed on small hardware platforms and LAN/WAN networks which support TCP/IP.

**SitaWare Headquarters MIP Replication**
- Tried and tested
- Exceptionally reliable
- Available for Block 2 and Block 3.0

SitaWare Headquarters MIP Replication software enables coalition interoperability through the exchange of plans, orders, and COP information between partner nations.

It is based on international MIP specifications about structuring information, making it easy to use in virtually all operating contexts, and is available in different versions that comply with the C2IEDM (MIP Baseline 2) or JC3IEDM (MIP Baseline 3.0) standards.

Compliance with key international standards, and the availability of easy-to-use APIs for linking seamlessly into other systems, makes it relatively easy and inexpensive to integrate this software with many other military systems and tools.
IRIS takes care of the complexities so that you can focus on your area of expertise, and use the functionality of IRIS to provide the underlying interoperability.

**IRIS Forms**
- Reduces project risks
- Saves development time
- Keeps solutions compliant

The IRIS Forms SDK enables developers to integrate message-based interoperability into their own applications. The IRIS Forms SDK covers APIs on both the backend IRIS Forms Server as well as the IRIS Forms and IRIS WebForms clients. The IRIS Forms Server APIs provide a consistent interface to the vast majority of relevant MTF standards (ADatP-3, USMTF, OTHT-GOLD, etc).

This enables system integrators to quickly and effectively build dedicated applications for handling specific types of messages. Using IRIS Forms SDK and IRIS Forms Server means that developers can focus on their area of expertise, and use the functionality of IRIS to provide the underlying interoperability. Additionally, hours of development time are saved and project risks are reduced since IRIS is field-proven and available off-the-shelf.

The IRIS Forms and WebForms APIs provide the possibility for programmers to embed the advanced message editor, prefilling contents, as well as customising the look of the editor. Using the Forms SDK, an application can be MTF enabled in minutes using the simple client side APIs.

**IRIS Information Mapping**
- Powerful Data Transformation
- Straightforward graphical interface
- Seamless Data Exchange

IRIS Information Mapping is a specialist development tool which makes it easy for systems integrators to implement many different NATO and US data exchange standards within national command and control systems. It paves the way to a well-integrated data environment that facilitates smooth, efficient data exchange between a wide range of different applications and technologies.

These include Message Text Format (MTF) messages, databases, XML and other structured documents.

**IRIS Standards Management**
- Manages interoperability
- Accelerates change releases
- Maintains control

IRIS Standards Management is a web-based tool for the definition and use of structured information standards, providing support for the management of MTF message definitions, XML Schemas and Symbology (MilStd 2525 & APP-6). With IRIS Standards Management, system integrators can generate mission files, schemas and graphics for loading into systems being developed.

IRIS Standards Management has a powerful configurable change management process which enables a system integrator to maintain control over the data through the use of permissions. Providing the ability to share and disseminate proposed or approved changes to all relevant stakeholders significantly speeds up the change release process.
About Systematic
Systematic is an internationally renowned software company with over 400 highly qualified employees. We provide scalable software products, services and projects for defence forces, security organisations and systems integrators. With offices in Denmark, the UK, USA, Australia, Sweden and Finland, we are delivering cost effective solutions to more than 100,000 users in over 40 countries.

Our ability to simplify critical decision making is based on our core competences within information management, application integration and interoperability. We focus on quality and process maturity. The maturity of Systematic and the quality of our software are of the highest standard, which is demonstrated by our CMMI Level 5-certification. This dedication to software quality and process control is mirrored in our ISO certifications for all related customer services.

Everything we do is underpinned by our core values of Simplicity, Trust, Performance and Forward-Thinking:

SIMPLICITY
Critical decisions are hard to make and may be a question of life or death. Systematic simplifies the complicated; we organise ourselves and act in an uncomplicated manner and develop solutions that make it simpler for people who make critical decisions every day.

TRUST
Systematic’s relationships with our customers and users are based upon mutual trust. Our solutions are typically used in difficult and hazardous conditions, and the users must be able to trust that our solutions work flawlessly.

PERFORMANCE
Systematic’s customers, partners and employees expect superior results. We strive to do everything a little better. Our customers expect high quality, delivery on time and within budget.

FORWARD-THINKING
If we desire to stay in the lead there is only one way – forward. To move forward, we must think forward and always be one step ahead. We challenge the current work processes and technologies, we think quickly to stay ahead.