

Fujitsu Secure Cross Domain Gateway Solutions

Enabling Secure Information Access and Exchange Without Compromising Productivity

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Security threats to an organisation's ICT infrastructure continue to evolve and become ever more sophisticated. With this evolving threat comes increased risk. This is especially the case for the Defence & National Security sector where the consequences of a security breach are exacerbated. Information exchange is key to improved productivity, efficient and accurate decision making and effective collaboration. So ensuring the right level of security is achieved and maintained to protect sensitive data, while enabling your people to work effectively, and provide access to the required information sources is a tricky conundrum.

The challenge is further compounded as the modern workplace is no longer a fixed location. Information exchange and collaboration – with colleagues, partners and allies – are essential capabilities that the Defence sector must deliver for its people to work effectively, wherever they are. The modern flexible workplace must allow seamless integration with the Internet and other systems. It's got to be delivered with assured security, the highest resilience and the best possible performance, while maximising productivity.

More specifically within Defence & National Security, security requirements determine many operations require information to be held at multiple classifications on multiple systems. While this creates a secure environment that protects operationally sensitive data, this can also create unnecessary overheads such as:

- Reduction in productivity as people work with many different systems
- Increase in costs
- Increase in equipment footprint as people require multiple machines for a single job role
- Potential lack of integrity of data due to increase in time to access and collate information.

Summary

Within Defence & National Security, information exchange is key to improved productivity, efficient and accurate decision making and effective collaboration. Being able to provide your users with safe, secure access to the Internet and integrate with operational command and control systems is a crucial component to enable your people to do their jobs effectively. But to fully exploit this level of integration it's crucial that the searches your users conduct on the Internet do not expose the reasons why access is required. To address this issue, Fujitsu is working closely with Nexor to help join up the networks and information systems that you need timely, yet secure access to, even if they operate at different trust levels.

There's a myriad of products and technologies available to help address this issue. Where the impact of a data loss or breach may not be great, commercial grade products may be acceptable to many organisations. But in higher threat environments, like Defence & National Security where attacker resources are likely to be more substantial and the subsequent impact of security breach is greater, a one-size-fits-all solution is unlikely to be adequate. Instead, multiple solutions and a building block approach is required.

Gateways Discovery Service

As a leading systems integrator, Fujitsu is well placed to design and deliver cross domain gateway solutions specifically tailored for the rigours demanded of Defence & National Security organisations. Using Fujitsu's Gateways Discovery Service can ensure that secure, efficient and affordable collaboration with allies and partners is an achievable target.

Our team of experienced Security Architects will work with you to evaluate and assess the threats and associated levels of risk that your organisation is exposed to. Once this detailed evaluation has taken place, our subject matter experts will enable your teams to understand the gateway options that will enable you to counter this threat and reduce disruption, both at home and abroad.

Continual Market Evaluation

Fujitsu works with a broad range of innovative technology providers, and we continually evaluate the market place for new products and solutions that will enable us to help our customers keep ahead of the latest threats. Our vendor-agnostic approach ensures we are able to work with the most suitable solution providers to address the exacting needs of customers. One of our chosen specialist cross domain gateway solution providers is Nexor who specialises in secure information exchange challenges for organisations with advanced cyber security requirements.

Fujitsu's building block approach, utilising Nexor's secure information exchange and cross domain solutions can connect your information and people, from the Internet to the highest levels of classification or threat. But at the same time still ensuring appropriate adherence to the principles of information assurance – confidentiality, integrity, authentication, availability and non-repudiation.

A Secure Information eXchange Architecture (SIXA) from Nexor

The ability to provide your users with safe, secure access to the Internet is crucial, and a pre-requisite to enable people to do their jobs effectively, regardless of which sector you operate in. But the searches your users conduct on the Internet can reveal a lot of information about the data they are searching for. And in the wrong hands, this data can be very damaging, especially to Defence & National Security organisations for whom security is of paramount importance.

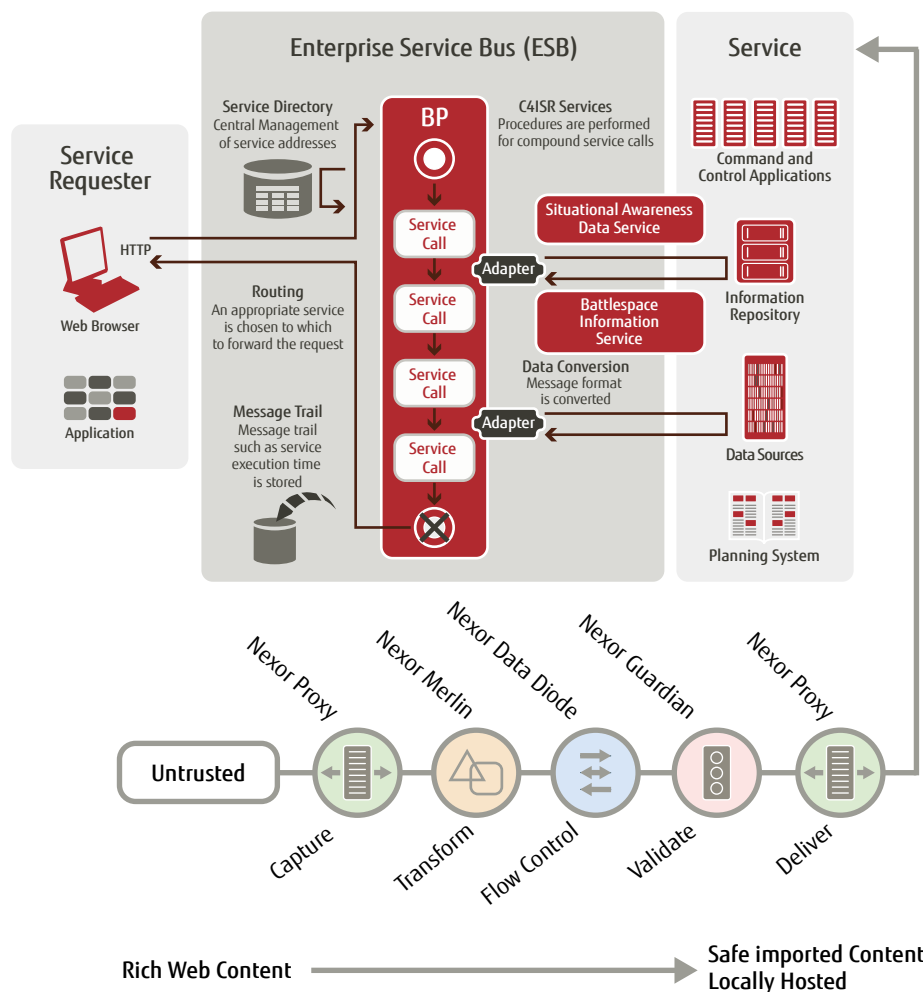
At higher security classifications, conventional approaches to this protection have led to many information systems being separated from each other, and from the people who need access to the assets they contain. This makes sharing data across network or security boundaries difficult, and in some cases impossible. The end result is an incomplete or delayed picture of a given situation which can lead to a compromise in decision-making ability.

To address this issue, Fujitsu is working closely with Nexor to help join up the networks and information systems that you need timely, yet secure access to, even if they operate at different trust levels. This cross domain solution scrapes the content of a website and rebuilds it on a

secure network via a data diode which guarantees that data is only permitted to physically flow in a single direction, thereby enabling secure data transfer to the isolated network(s). Any footprint of the user's search patterns is removed while retaining the integrity and accuracy of the data returned.

Fujitsu GELS – Exploiting information across the military enterprise

Nexor's SIXA technology and solution allows information which is normally constrained to low environments to be available in high ones. We've combined this with our GELS web-based user search interface that allows an easy-to-use, yet comprehensive textual, geospatial and temporal search and visualisation capability with advanced geo-mapping capabilities which enable the search and display of information within a geospatial context. Through the aggregated search capability across a range of differing structured and unstructured data sources users are able to discover, present and share "mash-ups" of data based on various search criteria. A wide range of data and file types can be searched and visualised including documents, PDFs, spreadsheets, imagery, telemetry, historical military track feeds as well as meteorological and hydrographical data.



Highly assured and accreditable

All of our solutions for Defence and National Security have been designed and built with security at their heart. Fujitsu consults extensively with CESG, the Information Security arm of GCHQ, and the definitive voice on the technical aspects of information security in Government. We also work closely with the Accreditation community to ensure that the security aspects meet their exacting requirements. The result is that all of our solutions have full cybersecurity capabilities built in to their core.

Nexor Company Overview:

Nexor is an SME based at a secure facility in Nottingham and has been delivering high assurance information exchange solutions to Government, Defence and Security organisations around the world for over 25 years. By enabling the authorised transfer of data between networks operating at different trust levels, our solutions improve productivity, increase collaboration and support more effective decision making by widening the timely availability of information and expertise, without compromising security.

NEXOR®

Nexor's Secure Information eXchange Architecture (SIXA®) consists of a number of configurable components that follow CESC's best practice design patterns for the import and export of data across security boundaries. In addition, we have developed an implementation methodology, CyberShield Secure®, to help us understand your exact information exchange requirements and your security and operational context. These allow us to balance usability, performance, timescales and budget with, critically, threat exposure, risk appetite and assurance process to design, deliver and support trusted solutions that address both business drivers and security concerns.

Why Fujitsu?

For over five decades Fujitsu has been a major supplier to the UK MOD, Government Departments and intelligence communities. As a result, Fujitsu has over 5,500 security cleared UK staff and the experience to deliver and manage both generic industry offerings and those tailored to specialist needs at OFFICIAL, SECRET and ABOVE SECRET classifications.

Fujitsu's Vision for the Digital Age

Defence has entered a new paradigm where information is generated and circulated on an unprecedented scale. In the complex matrix of system procurements this information is often segregated, stove-piped and difficult to bring together to support timely and effective decision-making.

Fujitsu's vision for the digital age is to make coherent information available whenever and wherever it is needed. We use our capabilities in networking and systems integration to link and enhance situational awareness - from strategic base to tactical theatre, from Defence supplier to dismounted soldier. Our approach extracts maximum benefit from existing investment in IT systems, innovating, developing and extending capability and functionality.

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