

# Integrated Information Environments



With more than 20 years of experience with the Canadian Department of National Defence as a provider of modelling, simulation, training, and complex systems engineering support solutions, CAE has built an international reputation for engineering excellence with leading-edge airborne and land-based systems and technologies.

At the heart of every modern system is mission-critical software. CAE is a world leader in developing fully integrated performance-based logistics solutions for the evaluation of weapon system requirements using comprehensive and immersive modelling and simulation technologies. CAE works with clients to determine capability requirements, identify the systems necessary to achieve those capabilities, and guides clients through the complex acquisition process to support the operational requirements.

Once in place, CAE has the experience and the technology required to monitor the health and performance of fleets deployed around the world and identify emerging performance degraders and applicable solutions. Services provided include proactive in-service trend monitoring, failure investigations, multi-configuration, multi-site, multi-scenario, and lifetime sparing solutions.

Using CAE's performance-based logistics solutions, fleet managers are empowered with the up-to-date and relevant information required to make confident, informed decisions on long-term, cost-effective support programs for weapon systems.



## Integrated information environment

An integrated information environment (IIE) provides the critical data required in any operational situation, from domestic to foreign theatres of operation. CAE's IIE solutions provide commanders with the required flexibility to adapt their operation and maintenance processes to the everchanging requirements imposed by real world situations.

System survivability is ensured through built-in redundancy. The system can operate in networked or stand-alone modes, providing the critical functions required to maintain the airworthiness program. The resulting real-time data-rich environments are accessible by other peer and corporate systems, providing total asset visibility 24/7.

### System features include:

- Total asset visibility in real-time providing an integrated information environment to commanders, operators, maintainers, fleet managers, logisticians, and contractors
- Airworthiness process continuity
- Integration of first to third line maintenance processes
- "Deploy anywhere" capability
- Scalability and adaptability
- Redundancy feature offering high availability rates
- Process and fault tolerance
- Secure system through role-based access control



## Optimized benefits

### Optimized weapon system support / performance-based logistics

- Measure, quantify, and increase fleet and system availability
- Identify root causes for system/equipment degradation
- Effectively manage multiple system configurations
- Quantify overall logistics performance
- Improved asset distribution (right spare, right place, right time)
- Perform/improve reliability-centred maintenance
- Optimized preventive maintenance program
- Support obsolescence management
- Identify and recommend process improvement opportunities
- Rapid access to logistics information (total asset visibility)
- Lower total cost of ownership while maintaining operational capability
- Enforce fleet airworthiness process
- Contribute to strategic planning
- Optimize performance using best commercial practices

## Certifications

CAE's IIE is certified and accredited to work over defence wide area networks (DWAN). The IIE complies with the Department of National Defence Airworthiness Policy to meet the stringent constraints of military operations, embedding the critical maintenance policies and procedures set out by the Technical Airworthiness Authority.

Technicians and fleet managers can easily adapt to the familiar processes embodied in the tool, reducing training requirements and minimizing operating risks. CAE's IIE is modular and features an open architecture that allows easy interface (data exchange) with peer systems through the production system (operations critical) or through a dedicated data warehouse (business critical) system. The system can support airborne and ground-based platforms and is scalable and adaptable to any fleet in all operational scenarios.

CAE's IIE solution ensures the integration of airworthiness and fleet management rules across all operational fleets, providing fleet managers with the performance-based logistics support necessary to meet operational requirements.

## Integrated logistics support services

### Traditional logistic support analysis includes:

- Reliability centered maintenance (RCM) / MSG-3 analysis
- Failure mode effects (criticality) analysis - FME(C)A
- Reliability and maintainability (R&M) studies
- Safety analysis
- Life cycle cost (LCC) analysis
- Level of repair analysis (LORA)
- Sparing analysis (fleet, system, multi-configuration, single-item, lifetime)
- Maintenance task analysis (MTA)
- Impact analysis
- Risk assessment evaluations
- LSAR data loads and reviews/comments
- Independent subject matter expertise

Canada  
CAE - Attn: Marketing  
8585 Côte-de-Liesse  
Saint-Laurent, Quebec  
Canada H4T 1G5

Tel +1-514-341-6780  
Fax +1-514-734-5718  
milsim@cae.com

United States  
CAE USA  
4908 Tampa West Blvd.  
Tampa, FL 33634

Tel +1-813-885-7481  
Fax +1-813-901-6429  
cae\_usa@cae.com

Europe  
CAE GmbH  
Steinfurt 11  
D-52222 Stolberg, Germany

Tel +49-2402-106-0  
Fax +49-2402-106-270  
info@cae-gmbh.de

United Kingdom  
CAE UK plc  
Innovation Drive, Burgess Hill  
West Sussex RH15 9TW  
England

Tel +44 (0) 1444-247535  
Fax +44 (0) 1444-244895  
cae\_plc@cae.co.uk

Australia  
CAE Australia Pty Ltd  
Unit 40, Slough Business Park  
Slough Avenue  
Silverwater, NSW 2128

Tel +61-2-9748-4844  
Fax +61-2-9714-0300  
caeaus@cae.com.au

Singapore  
CAE Singapore (S.E.A.) Pte Ltd  
33 Ubi Ave 3 #08-04 VERTEX  
Singapore 408868

Tel +65-6886-9012  
Fax +65-6886-9021  
milsim@cae.com

India  
CAE India Pvt Ltd  
Survey No.26 & 27, IVC Road  
Bandaramanahalli Village, Uganvadi  
Post Devanahalli Taluk, Bangalore -  
562110 India

Tel +91-80-2625-6000  
Fax +91-80-2625-6160  
caeindiapvtltd@cae.com

