

Network Centric Collaborative Targeting Systems

OBJECTIVITY SOLUTION UNIQUELY ENABLES INTEGRATION PROGRAM BETWEEN U.S. AIR FORCE AND NAVY

www.objectivity.com

Corporate Headquarters

3099 N. First Street, Suite 200
 San Jose, CA 95134 USA
 Tel: (408) 992-7100
 Fax: (408) 992-7171

L3 Integrates US Navy’s Cooperative Engagement Capability (CEC) and the US Air Force’s Network Centric Collaborative Targeting (NCCT) Systems

Objectivity/DB is the integration platform that L-3 is using for the U.S. Air Force’s Network Centric Collaborative Targeting (NCCT) system and the U.S. Navy’s Cooperative Engagement Capability (CEC) system.

Objectivity/DB is the real-time and scalable “data fusion” repository that monitors, analyzes, responds and reports on all platforms and assets such as aircraft, etc., uniquely satisfying the real time data management requirements for the NCCT system. This integration program is part of the U.S. Navy’s Trident Warrior exercise series, involving an Expeditionary Strike Group, U.S. Air Force and U.S. Army aircraft, as well as coalition aircraft.



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Network-Centric Warfare System

The U.S. Air Force’s NCCT is an open network-centric architecture and software design that horizontally integrates airborne and ground assets to detect, locate, track and target ground targets. Through machine-to-machine exchanges, NCCT supports time-sensitive and prioritized targeting operations more efficiently, accurately and quickly. CEC is the U.S. Navy’s premier network-centric warfare system, which shares radar data between participants to precisely track airborne targets, providing combat identification on airborne tracks and engagement-quality information to all participants. CEC is fielded on several E-2 aircraft, cruisers, destroyers, amphibious ships and aircraft carriers.

Reducing Target Acquisition Time by 90%

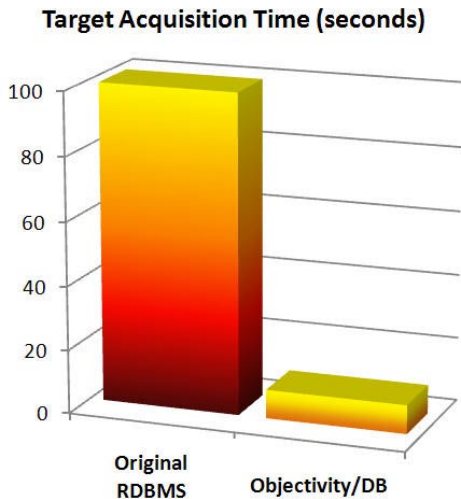
The Objectivity/DB is at the heart of the NCCT Fusion Engine (NFE) supporting the NCCT application. Objectivity/DB is storing and managing vast amounts of disparate information performing data fusion from geospatial and sensor data from the NCCT sensor network. Objectivity/DB provides a reliable, scalable repository for the wide range of complex data types found in this type of mission-critical application. The Objectivity platform is highly optimized for performance and throughput in systems that handle highly interconnected data. Objectivity/DB’s distributed processing system architecture, with no

single point of failure, provides the robustness necessary for this application. Objectivity/DB handles all aspects of interoperability, including language, operating system, file system, networking and hardware dependencies.

As part of the NCCT concept, all participating platforms and ground stations can not only exchange data, they can also collaborate to coherently collect and create new information that would otherwise go unreported by traditional “stove piped” platforms that do not easily share and disseminate information. “By efficiently netting and synchronizing sensors in real-time and combining detections, it is possible to increase the probability of detecting and identifying a target, while also reducing

the time it takes to accurately locate targets by more than 90%,” according to Gary Davis, director of the NCCT program for L-3 ComCept. “This refined information updates a common, shared network Objectivity database so that the problem of multiple reports on a single target is dramatically reduced.”

The Objectivity/DB platform reduces the time it takes to accurately locate targets by more than 90%



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Objectivity, Inc. and Objectivity/DB

Objectivity, Inc. provides distributed data management solutions for business, science and government organizations, and is the enabling technology for some of the most complex and mission critical systems in operation around the world today.

The company's flagship product, Objectivity/DB, is unique in its support for distributed architectures and complex data management requirements including high-speed data ingest, data fusion and correlation, massively parallel processing, relationship analytics and graph traversal, and, of course, the ability to scale to meet the most demanding data storage requirements.

Let us help you innovate with confidence.

Objectivity/DB benefits include

- **Scalability:** Uniquely distributed, federated architecture provides a single logical view to virtually unlimited data sources. A single Objectivity/DB federation may contain more than 65,000 individual databases, and provides more than a yottabyte (one quadrillion gigabytes) of addressing space. That's a thousand times the space on all the hard-drives in the world today, by the way.
- **Performance:** Near real-time performance on vast volumes of complex interrelated data.
- **Flexibility:** Design and deploy the system you want, with complete interoperability among heterogeneous operating systems and language bindings. Objectivity/DB supports C++, C#, Java, Python, Smalltalk and other programming languages, and can run on virtually any hardware.
- **Reliability, Low Maintenance:** Designed to support stand-alone embedded systems or data services across vast networks, with little or no administrative overhead. Objectivity/DB is used in systems and devices that simply must work, all the time.

With Objectivity/DB, you can manage your data, rather than your data management system. Objectivity, Inc. provides a solution that addresses today's data and systems requirements, and enables developers and integrators to design and build the systems they want and need.

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Let us help you evaluate Objectivity/DB

Objectivity, Inc. has offices and representatives worldwide, and works directly with organizations, integrators and technical teams to recommend solutions and support options specifically tailored to your project and technical requirements. Contact us to schedule a consultation.

About the company and technology

- U.S. owned and operated, with GSA schedule contract (#GS-35F-0119R) and clearances
- 20 years of experience working with agencies and organizations with the most complex security, intelligence, industrial and business requirements.
- A patented data management solution that has been built and optimized for virtually unlimited performance, flexibility, scalability and reliability (zero administration and no unplanned downtime).
- Our team of expert systems engineers and support staff are ready to assist you with any or all phases of your project.
- Our solution has been recognized by the U.S. Government for enabling and supporting mission-critical national security and intelligence systems.

Contact our technical representatives to schedule a consultation today.

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