

Flexible, extensible, comprehensive Command and Control course of action analysis and planning tool.



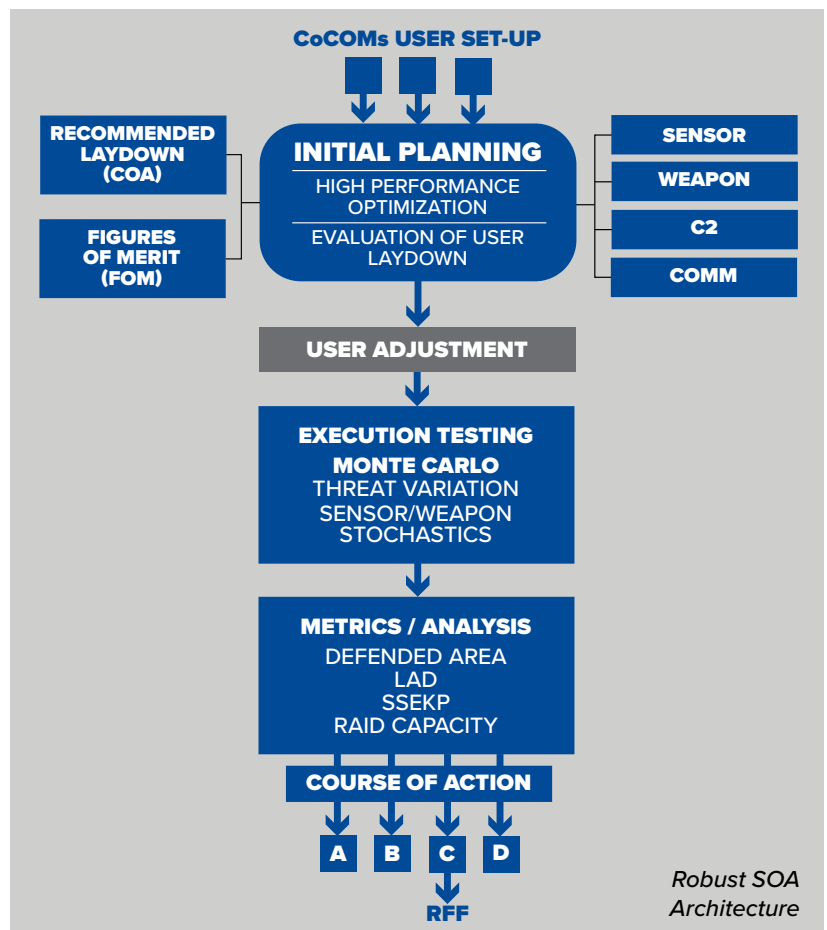
OVERVIEW

Optimal planning is key to maximizing resource effectiveness for military commanders. By understanding resource limitations and the actions required to overcome the limitations, the military commander can achieve mastery in defense and other domains. Rapid planning and course of action recommendations enable immediate improvement in defensive postures and dynamic adaptation to address rapidly changing real world events. Acquire is a flexible, extensible, comprehensive Command and Control (C2) Course of Action (CoA) analysis and dynamic planning tool that facilitates military command success.

TECHNICAL

Acquire® is built on a microservices-based architecture that allows users to automatically specify complex threat scenarios, Blue/Coalition force capabilities, degradation of resources, different shot doctrines, varying Battle Management (BM) techniques and tuned communications performance. CoAs are recommended based on Figures of Merit (FOMs), detailed metrics comparisons, defended area analyses, visual gap analysis and Monte Carlo simulation analysis.

Acquire is composed of three components: Planning and Optimization, Execution, and Analysis. In Planning and Optimization, users develop Red and Blue/Coalition designs and scenarios, evaluate the design, and optimize the allowing command to determine best battle management practices to defend against complex raid threats. Metrics generated include raid performance, defended area, coverage gaps and more.



Acquire is a rapid, dynamic planner and CoA recommender that optimizes available resources for defense against complex threats and recommends cost effective improvements. Benefits include:

- *Fast and accurate – optimizes sensors and weapons in minutes.*
- *Automated metric evaluation, defended area and launch area denied analyses with no lengthy simulation runs.*
- *Faster-than-real-time simulation reduces run time and enables rapid Monte Carlo studies.*
- *Web-based GUI (laptop, smart phone, table, etc.) provides user the ability to assess metrics in a distributed fashion.*
- *Scalable microservices and containerization enables expansion to include multiple missions (SHORAD, IAMD, space, intel, etc.)*

SECURITY / OPERATION

Acquire security features include role-based login, application authentication and message encryption. Further, the Acquire Application Programmer's Interface (API) operates inside a container isolating the API from the rest of the system as an extra layer of security, while ensuring the software does not conflict with other required system dependencies.

Arcarithm provides required training on how to operate Acquire, and how to understand the output, with onsite training available. A training manual is provided with each Acquire license, and Arcarithm provides call center support as well.

SYSTEM REQUIREMENTS

CPU	Intel Core i3 or AMD Athlon 6 (or better)
Memory (RAM)	64-bit System: 16GB minimum 32-bit System: 8GB minimum
Operating Systems	Ubuntu 16.04 or higher RedHat 7
Graphics Card	Standard
Minimum Screen Resolution	1280 x 720 pixels
Storage	256GB

Acquire is delivered via direct digital download or via a set of DVDs.

PRODUCT DETAILS

Manufacturer	Arcarithm
Product Name	Acquire®
Version	2019
Manufacturer Part Number	A2019C
Product Type	Single License
Platform	Linux
Shipping Method	Digital delivery (or DVDs)

ABOUT ACQUIRE & ARCARITHM

Unlike current designs and plans that are static and optimized for specific scenarios which may or may not occur, Acquire is a highly flexible, open architecture that allows the user to perform trade studies and "what if" analyses on a wide variety of scenarios. The modular architecture provides ability to attach new models, algorithms, and visualization techniques. Taken together, these abilities provide the user quick and easy access to advanced analyses. Arcarithm delivers a depth of understanding and operational maturity beyond the capability of most companies. Our experience with every aspect of algorithm design, training, deployment and evaluation allows Arcarithm to produce quality products quickly and effectively, with the highest levels of reliability and accessibility. Arcarithm has been developing and providing services to the U.S. Military for more than seven years.



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