

🎾 Capabilities Snapshot

G2 Ops, Inc. (G2 Ops) provides leading-edge **systems modeling**, **systems engineering**, and **cybersecurity engineering** for DoD, DHS, and a growing list of commercial clients. Our teams of seasoned cybersecurity, software, and systems engineers bring decades of experience in systems modeling and data analytics to improve systems and illuminate cyber strengths and weaknesses. Our clients and the media have recognized us for our pioneering applications of **Model-Based Systems Engineering (MBSE)** to solve complex challenges.

Practical Solutions to Complex Systems and Security Engineering Challenges

G2 Ops takes a practical approach to customer challenges and has become an industry leader in applying advanced cybersecurity analytics and MBSE methodologies within some of our nation's most complex tactical, enterprise, and mission-critical environments.



Comprehensive Application of MBSE

- Fully operationalized digital environments enabling model-based generation and management of all engineering data
- Tool suites, tailored plug-ins and software enhancements that enable MBSE support across all elements of the systems engineering "V"
- MBSE-enabled automation of specification generation, analytical reporting, RMF artifacts, cybersecurity assessments

Mission-Focused Cyber Vulnerability Analysis

- Strategic Optics for Intelligent Analytics (SOFIA)
- Vulnerability analysis based on critical operations support to mission
- Threat intelligence integrated with vulnerability data enabling **prioritized mitigation**
- Penetration pathway analysis informed by current global threat activity
- Fully interactive dashboard and "what-if" analysis







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COMPANY FACTS

Woman-owned small business

Locations:

- Arlington, VA
- San Diego, CA
- Virginia Beach, VA

Contract vehicles:

- SBIR Ph. III Basic Ordering Agreement
- SeaPort-NxG
- GSA IT Schedule 70
- GSA Professional Support Services (PSS)

Security Infrastructure:

Top Secret Facility Clearance with Classified MBSE, Cyber and SW Development Environments



CONTACT

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Model-Based Systems Engineering

G2 Ops provides MBSE solutions for our nation's most critical networks. MBSE is radically changing how systems are developed and modernized, enabling greater visibility to distributed technology infrastructure and predictions of risk, performance, and cost. Digital twins created by MBSE are used for architecting or remediating system-of-systems technology gaps where complex interdependencies exacerbate the challenges of identifying risk levels, establishing viable project plans, and budgets.

YP Cybersecurity Engineering

G2 Ops delivers tailored technical, programmatic, and sustainment services for the DoD's most sensitive systems and networks. Our cybersecurity experts apply G2 Ops unique capabilities with industryleading tools to design and assess systems to have the cybersecurity resilience and active protection measures required to safeguard our military's critical infrastructure.

G2 Ops has used MBSE for:

- OMG Systems Modeling Language (SysML) certified engineers
- Acquisition and capabilities requirements
 development
- Baseline/change management
- Interface and integration risk management
- Mission and operations analysis
- Performance modeling and simulation
- Test and evaluation development
- Thread reliability, maintainability and availability (RMA) optimization
- MBSE-supported cyber risk management
- Department of Defense Architecture
 Framework (DoDAF) artifact development

Our core services include:

- Full lifecycle cybersecurity systems analysis, engineering, and management
- Vulnerability/risk assessments and Supply Chain Risk Management (SCRM) support
- Commercial and Private Cloud engineering
- Risk Management Framework (RMF) Assessment & Authorization (A&A), Information Systems Security Engineer (ISSE), and Validator services
- Security process, policy, and Tactics, Techniques, and Procedures (TTP) development
- Cyber exercise organization/execution and tabletop mission risk assessment
- RMF automation via MBSE
- Commercial Solutions for Classified (CSfC) and Cybersecurity Maturity Model Certification (CMMC) engineering

🥐 Software Engineering

G2 Ops has specialized expertise in the development of secure, data-driven, cloudbased solutions for global distribution in the public and private sectors. Our engineers employ a systematic, standards-based design approach in conjunction with a contemplative data strategy that incorporates advanced analytics, machine learning techniques and proprietary risk management algorithms.

Our software and analytical services include:

- Web application design, development and testing
- Relational and NoSQL database design, development and maintenance
- Data mining and pattern discovery
- Data cleansing and format conversion
- Information visualization and user reportingSystems integration/application
- programming interface (API) development
- Machine learning and predictive analysis
- Agile software development and build methodologies