

ACCELERATING THE DELIVERY OF COMPLEX SOFTWARE SYSTEM CAPABILITIES

Innovative Defense Technologies (IDT) is an information technology company headquartered in Arlington, Virginia. Founded in 2006, IDT designs, develops and delivers best-in-class solutions that facilitate the rapid delivery and modernization of data and information system capabilities.

IDT's leading-edge solutions are based on **ATRT**, a US Navy initiative originating from the SBIR program. ATRT's patented methodology incorporates a sophisticated digital approach to Model-Based Systems Engineering (MBSE), Continuous Integration, and Automated Test and Analysis. Using these innovative technologies, IDT is transforming the fielding of large, complex, critical systems—dramatically increasing quality and system performance while decreasing time and cost.

ATRT Technologies Enable

- Modernization of data and information processing
- Optimization of system performance
- Incremental software updates delivered on demand
- Real-time identification of configuration changes

for Complex System of Systems

IDT engineers utilize digital engineering and advanced technologies to conduct exceptional mission engineering and capabilities-based testing for our customers. These enabling technologies include:

- **Virtualization**
- **Automation**
- **Fuzzing**
- **Visualization**
- **Big Data Analytics**
- **Image Recognition**
- **Continuous Integration**
- **Machine Learning**
- **MBSE**

To ensure efficient operation in today's climate of increasing customer demands and cyber security challenges, IT system owners and operators must be equipped with up-to-the-minute technologies. Complex systems must be synchronized across multiple domains to deliver value to customers. IDT's solutions enable rapid integration, communication and testing—bolstering the ability for all system platforms to work together to transform the speed of system delivery, usher in modernization, and execute tasks reliably.

AWARDS AND INDUSTRY RECOGNITION



IDT'S CAPABILITIES

IDT is committed to delivering technologies that ensure system quality, functionality, and readiness. Our engineers collaborate in a secure, disciplined environment utilizing **Automated Test and ReTest (ATRT)** technologies and disruptive innovation to create high-performance solutions. Our dedication to discipline, innovation, and quality is foundational to the solutions we develop and has transformed the delivery of software capabilities for our customers.



Continuous Integration

IDT's Continuous Integration (CI) solutions enable the efficient merging, testing, and integration of software at frequent intervals. CI helps engineers detect errors quickly, prevent integration problems, and increase quality controls. The use of **Virtualization** offers unparalleled flexibility to rapidly assess software updates across multiple configurations. Our CI solutions improve technical performance, decrease costs, and speed the delivery of capabilities.



Automated System Testing and Certification

IDT offers highly effective automated solutions for the entire system testing lifecycle. Our engineers design comprehensive testing strategies that include: requirements management, development, test execution, reporting, and certification. The use of **Image Recognition** through deep learning algorithms enables the testing of visual content. Our automated testing solutions enable testing to be conducted earlier and more frequently, reduce redundant testing, and provide faster and more agile 24/7/365 test execution and certification.



Automated Data Analysis

IDT's powerful automated data analysis capabilities enable customers to rapidly evaluate system behavior against requirements and performance specifications. Our solutions incorporate state-of-the-art modeling, **Big Data Analytics, Visualization, and Machine Learning** techniques to enable high-fidelity analysis and requirements verification to identify system problems and accelerate defect resolution. These solutions support complex systems requiring data-intensive evaluation which frequently exceeds program resources.



Cybersecurity

IDT's information assurance capabilities enable the efficient management of software security in large enterprise systems. IDT's cybersecurity solutions certify and protect complex networks against advanced persistent cyberattacks using automated end-to-end vulnerability assessment and remediation. Our processes incorporate **Fuzzing** to discover coding errors and security loopholes. IDT's cybersecurity solutions enable real-time identification and rapid resolution of security vulnerabilities.



Cloud Computing

IDT is at the forefront of offering cloud-enabled solutions for the U.S. Government. We understand the security concerns surrounding the placement of sensitive data in a cloud environment. Our highly secure cloud solutions provide access to multiple software capabilities while minimizing hardware and storage needs and maximizing efficiency. IDT offers a secure, cloud-based development environment that enables DevOps, including CI, Agile development, and iterative automated testing.



ACCELERATING THE DELIVERY OF CAPABILITIES