

Spatial Integrated Systems (SIS) specializes in the design, development, implementation, and fielding of process-oriented solutions for DoD and commercial customers. SIS markets its digital 3D data capture technologies integrated with commercial off-the-shelf (COTS) software. SIS also provides a wide range of services, solutions, and software products.

SIS products, solutions, and services address challenges ranging from optimally leveraging advanced technologies to adding value to COTS software and hardware to implementing unique enterprise-wide IT systems.

SIS's concepts, designs, and solutions provide new levels of innovation for improving the effectiveness of today's warfighter and commercial processes.

INTEGRATED LIFECYCLE MANAGEMENT SYSTEM (ILMS)

ILMS integrates digital 3D data capture systems with 3rd party COTS automatic identification technology (AIT) peripherals, COTS collaboration and CAD modeling tools into an enterprise-wide solution. ILMS enables product lifecycle management to transition from manual, paper-based processes to real-time, digital-based processes that are accessible via secured web services. Scalable to address the customer's most pressing product management requirements, ILMS's open architecture and incorporation of wireless platforms for new and legacy system integration ensures that product lifecycle information is accessible for collaboration by all stakeholders anytime, anywhere.

COMPOSEABLE COMMAND CENTER (C3)

The Composeable Command Center (C3) program developed a unique agent-based infrastructure called the Framework, as a new model for collaborative and interoperable Command and Control (C2). The Framework consists of loosely coupled and dynamically formed agents that transport data and information between the application modules, operator displays, and distributed data repository services. The Framework interface agents enable a revolutionary "plug and play" capability with any desired legacy and/or net-centric hardware/software element (i.e. any system, sensor, application, tool, database,



etc.,) for quick and efficient systems interoperability. The C3 interoperable and re-configurable attributes are scalable and extensible to accommodate collaborative mission needs, ranging from Navy C2 to Homeland Security and Emergency Response applications.

REVERSE ENGINEERING AND RAPID PROTOTYPING

The ability to produce quality replacement parts for DoD systems and commercial components are significantly impacted by lost or inadequate documentation, engineering data, company closures; and/or a rapidly retiring workforce. By integrating SIS's digital optical technology with high-end CAD modeling and design software, SIS's VZX Imaging system serves as the ideal first stage solution for generating technical data packages that link directly into digital fabrication and computer-aided manufacturing. VZX Imaging produces 3D solid models for reverse engineering, rapid prototyping, and nondestructive testing of parts. SIS is an authorized reseller of ZCorporation 3D printing system products.



LASER SCANNING

SIS provides digital scanning solutions and services using 3DIS digital laser scanning technology as well as other commercially available scanning systems. 3DIS is ideally suited for maintenance, repair, overhaul, modernization, and damage assessment of spaces, structures, or compartments. Designed by SIS, 3DIS couples laser scanning and a digital camera to generate a dimensionally-accurate digital 3D model and export files formatted for processing by industrial-grade 2D/3D CAD tools.



Much of SIS's Modeling services include post processing of the scan-captured data output into 3D models and subsequently into 3D CAD models.

REAL TIME 3D CAMERA IMAGING

3D Snapshot is a breakthrough digital 3D imaging system that upon executing proprietary algorithms generates a 3D geometry with 2D texture overlay of the captured image. The entire process, from data capture through generating 3D point clouds, solid model and textured 3D model, is performed automatically with no off-line processing by the user. This technology provides transformational improvement of real-time facial recognition matching capabilities against both archived 3D images and existing 2D photographic databases. The system can also be modified for OEM partner applications.



ROBOTICS AND UNMANNED VEHICLES

SIS applies its expertise in robotics and image processing to enhance the operational effectiveness of unmanned vehicles. SIS is developing a Multi Purpose Sensor System (MPSS) for advanced maritime perception and intelligent autonomy for unmanned vehicles. MPSS provides new capabilities in sensor technology, automated scene monitoring for navigation, with enhanced detection, identification and avoidance of obstacles. It also performs automated scene understanding and modeling to provide dynamic, geospatially accurate situational awareness.

ENGINEERING SERVICES

Engineering services encompass design, application development, system integration, prototyping, and system testing. SIS also undertakes research and concept development and analysis prior to moving a project into advanced engineering development.

PROFESSIONAL SERVICES

Professional services rely on the combined technical, business, and military experience of its staff and an extensive network of professionals available on an as needed basis. Professional services typically involve activities such as the design, development and implementation of enterprise solutions. Other professional services include project management, technology strategy development, system requirements gathering, and roll out of integrated data environments.

innovative solutions to

sophisticated processes

SOFTWARE

SIS is a Federal and commercial Value Added Reseller (VAR) for Siemens' entire suite of CAD/CAM/CAE high-end design software, product data management (PDM), product lifecycle management (PLM), and collaboration application software inclusive of maintenance, training, and implementation services. SIS provides Unigraphics NX, Imageware, Solid Edge, I-deas NX, and the entire suite of Teamcenter products (i.e., Enterprise, Engineering, Visualization, Community, Project) software.



SIS offers software for its digital 3D imaging systems. The 3D imaging software supports system operations inclusive of preliminary analysis of scanning results, light-duty visualization, point-to-point measurements, and simulation.

Focus

Since its founding in 1997, SIS has focused its expertise in digital 3D data capture, modeling, visualization and staff abilities in Systems Integration, Research and Development, Technology Transfer, and Enterprise Support Services to develop technology solutions that improve process efficiencies.

SIS professionals include computer scientists, hardware engineers, software engineers, system engineers, CAD modelers and designers, manufacturing engineers, and business professionals. This team brings extensive experience in conducting and managing engineering and information technology projects and provides support services to a broad range of challenges. The team also brings a unique understanding of digital 3D data capture that enables it to identify applications that would most benefit from this technology and to develop economically viable solutions.

SIS is committed to sustaining its high standards in technical expertise, professionalism, project timeliness, and cost effectiveness and to continue its contribution to the safety and fighting efficiency of the United States Armed Forces.

MISSION

SIS develops and integrates end to end technology solutions resulting in exceptional value for our Government and Commercial customers, enable by its core competencies:

- ◆ Digital 3D imaging and visualization
- ◆ Reverse engineering and rapid prototyping
- ◆ Product data and lifecycle management
- ◆ Autonomous vehicles and sensors technologies.



Spatial Integrated Systems



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