Enterprise Information Technology (IT) Services

*S4 Inc. has a proven track record of introducing, maintaining, integrating and improving IT tools, systems & services*

Since its founding in 1999, S4 Inc. has specialized in providing high quality, responsive IT Services to US Government and Department of Defense (DoD) customers. Our certified and experienced professionals offer solutions that reduce risk and introduce efficiencies, often saving valuable time and/or money.

**Enterprise Service Management**

**Asset Management.** S4 Inc. manages a 6760 SF climate controlled warehouse IAW industry standards for proper storage of IT assets. We perform warehouse, storage, and service asset shipping/receiving functions; and store, inventory, package, ship, receive and deliver classified and unclassified ADPE service assets to provision and/ or retire services. On a monthly average, S4 services 109 equipment account owners by fulfilling over 24 orders and delivering over 531 systems to N&NC account holders and customers. We also receive an average of 350 systems to replenish the warehouse Bench-Stock and Technical Refresh inventories. The warehouse inventory consists of over 550 line items in which the value including Bench-Stock and Technical Refresh inventory is over $3,948,978.95. Also, the warehouse processes and decommissions over 155 accountable systems and over 1,000 consumable systems monthly. S4 receives, processes, and delivers the equipment to Fort Carson’s Defense Reutilization and Marketing Office (DRMO).

S4 also provides inventory/configuration control of hardware (HW), software (SW) and maintenance/warranty coverage while acting as equipment custodian. We maintain account paperwork; perform annual inventories; and track software provided as Government Furnished Property (GFP), as well as contractor & government furnished SW licenses. S4 ensures that SW maintenance agreements are up-to-date and renewed without lapse of coverage; documents the status of SW license numbers and maintenance; and ensures that software meets accreditation requirements including Certificates of Networthiness (CoNs).

**Service Desk.** S4 Inc. delivers 24/7/365 enterprise computer and communications support, network and switch infrastructure, data/voice equipment operations and maintenance, and direct customer services down to and including the desktop. As part of a 24x7 hour call center, S4 provides Tier I support to almost 60,000 customers with computer service (including email distribution and user account management) via an Automated Call Distribution (ACD) system. We monitor a 24/7 operation help desk supporting 180,000 Users. S4 provides accurate and timely monitoring of multiple IBM mainframe and/or server systems at a second level of support. S4 determines, analyzes and resolves system problems such as system performance degradation, network monitoring & recovery, and workload monitoring & recovery.

S4 manages the NORAD and USNORTHCOM (N&NC) J6 service catalog. This service catalog is a comprehensive list of IT services available to customers, N&NC directories, subordinates, and various other commands. Customers can leverage information to help decide which service is right for their needs. We sustain both a customer-facing view from which customers can browse and select services, and a technical view documenting exact requirements and processes. S4 has incorporated the entire catalog into the ticketing system for N&NC; allowing for customers to select both incidents and service requests pertaining to an individual service. Through this automation, S4 has detailed real time analytics, providing significant Total Cost of Ownership (TCO) for each service.

**Mobile Systems.** S4 Inc. provides engineering support, mobile policy development and subject matter expertise for mobile IT initiatives including the Electronic Flight Bag (EFB) and its help desk. S4 serves as the support focal point for review, analysis and recommendations of technical solutions, process improvements, and strategies for mobile IT projects. We analyze architecture and design, and support integration of mobile technology into existing systems when appropriate. S4 assisted in provisioning over 5000 EFB devices, as well as 1700 Commercial Mobile Technology (CMT) devices (Apple iPhones).
**Database Administration.** S4 designs, develops, documents, migrates and tests database and other software applications. We provide database development and support including software such as Visual Basic, Microsoft Access, Oracle, Lotus Notes, UNIX, Microsoft SQL Server. S4 is responsible for all database management associated with organizational databases. This involves organizing and loading data, generating quality control reports for same, check pointing the database, performing database retrievals, and maintaining log files and a database dictionary. S4 incorporates both user and infrastructure generated updates into the databases. We help users identify and document database requirements, including the evaluation and analyses of new HW/SW packages. S4 also offers SQL Server and Access database support to retrieve data from external systems. S4 monitors database storage and integrity and offers recommendations for storage updates and upgrades. S4 analyzes and provides reports on system health, storage and usage. We also maintain existing databases supporting websites and create new databases as required.

**Data Center Operations**

**Systems Operations.** S4 Inc. delivers state-of-the-art system administration solutions and support for HW and SW platforms including the legacy, Government-Off-The-Shelf (GOTS), Open Source, Commercial-Off-The-Shelf (COTS) and COTS-tailored applications that reside on them. The hardware/software, and physical and virtual servers supported include: application servers, web servers, access servers, communications, performance monitoring, print servers, hypervisors, physical and virtual file servers, reporting tools, etc., and all tasks associated with their backup/recovery, performance, and operations. S4 provides administration for local and remote systems for various operating environments (development, test, integration, pre-production, and production, etc.).

Our functional systems administrator (FSA) support services ensure that servers and associated SW are available on a 24x7 basis. Each server is available 97% of a 24-hour day, excluding scheduled outages. We ensure that servers, PCs, workstations, laptops, peripherals (both wired and wireless), communication devices, operating system and common-use application SW, network systems, LAN interfaces and other information management services are properly configured for network operations, are on-line, and are available to the customer.

**Storage Management.** S4 Inc. manages, stores, disposes of, restores and tests backups, and cleans/maintains backup devices. We manage, configure, troubleshoot, and upgrade the remote N&NC Disaster Recovery (DR) replication and fail-over capabilities including Storage Area Network (SAN), Disk to Disk backup system, and archive systems at the remote DR location. S4 manages, maintains and restores data archive storage. We also create, maintain and restore back-ups for system configurations, application, logs and user data.

**Network Engineering.** S4 analyzes requirements documentation and coordinates the validation of technological specifications. We research and provide estimates of costs of viable options (including equipment, engineering, installation, quality assurance, and sustainability cost). S4 evaluates technical solutions and addresses planning to meet current and future projected demand of reliability, availability and maintainability; attain optimal operational efficiency; and effectively interface with existing and future systems. We evaluate the design, engineering, installation and testing of LANs, other prevalent networks, existing patch panels, available bandwidth, inside wiring, and existing inside and outside plant (copper and fiber) distribution systems. S4 evaluates opportunities to converge base networks where possible as part of overall infrastructure modernization. We analyze C2 equipment ensuring the comprehensive interoperability and integration of hubs, routers, bridges, FM/UHF/VHF/HF radio systems, print servers and associated LANS, microwaves systems, telephone switches, and other equipment identified as components of the base telecommunications infrastructure. This includes all new technology associated with Unified Communication (UC) and the DoD movement to everything over IP (EoIP).
Critical Infrastructure Management

Facility Engineering. S4 Inc. provides engineering construction project management services from conception to completion for projects at DISA facilities and develops and maintains a master raised floor plan for each site to position all data processing supporting equipment for optimal environmental, electrical and communications support. S4 maintains 46 service contracts and 23 on-going engineering projects for 14 datacenters worldwide; all on time and on budget. S4 conducts surveys and inspections of facilities and datacenters for compliance with DISA Computing Services Facilities Standards as well as federal, state and local building codes. Systems surveyed include: electrical and mechanical distribution systems; Uninterruptible Power Systems (UPS); HVAC; building automation systems (BAS); fire detection and suppression; structural; Secure Compartmentalized Information Facilities (SCIFs); and all other facility Real Property Installed Equipment (RPIE). Results of facility inspections are used for planning and budgeting of Sustainment, Restoration and Modernization (SRM) work and projects. S4 performs engineering calculations such as rough sizing of mechanical, electrical and structural facility systems and components. Project packages are submitted using AutoCAD.

S4 also supports the fit out and transition of USSTRATCOM’s new Command and Control Facility, currently under construction, with completion and occupation expected by FY 2019. S4 provides planning and execution support for facility furnishing efforts and space management using AutoCAD associated with representing a furnishing layout within a Building Information Model (BIM). S4 utilizes Revit software to support construction of a BIM to reflect a change in facility data or construction efforts caused by a Military Construction (MILCON) change-order. We create and edit BIM models, templates, etc., and conduct space analysis based on Air Force guidance and requirements.

S4 delivers on-site facility management support for the maintenance and operation of facility, infrastructure and facility IT support equipment. Tasks include major and minor repairs, modifications, replacements, and installations of equipment and systems for routine mechanical and electrical equipment operation, electrical distribution system modifications, scheduled preventative mechanical/electrical maintenance, unscheduled mechanical/electrical maintenance and repair, component repair and replacement, and system upgrades and modifications. Some electrical tasks are on energized systems and must be accomplished in conformance with NFPA70E.

Application Development

Web Page Development. S4 Inc. develops new web-based applications utilizing existing coding options such as ColdFusion, XHTML, HTML, CSS and utilities such as Dreamweaver, SQL, MS Access, and PaintShop Pro. S4 gathers business and technical requirements regarding technical design, front-end development, back-end development, and systems integration development through discussions with program offices and users. We make existing systems more useable by including an improved user interface, additional reporting tools, and implementation of tracking features. S4 resolves application defects by testing the system, working with customers regarding issues, and correcting any problems. We design interface changes using industry-standard technologies including Hypertext Markup Language 4 and 5, Cascading Style Sheets 2.1 and 3, JQuery, Bootstrap and other design frameworks.

S4 maintains and updates the Public Key Infrastructure (PKI) authentication implementation when changes are implemented in the Air Force PKI system. We maintain, monitor and update the authorization system connection using the secure Lightweight Directory Access Protocol to Air Force Directory Services as the authoritative source for user lookup. The computer programming and web-development support functions maintain existing web-enabled database applications and provide future system planning, design, development, maintenance, and implementation to support various cyberspace capabilities.
Enterprise Architecture. S4 Inc. provides Enterprise Architecture (EA) support using various business methods, analytical techniques and conceptual tools to understand and document the structure and dynamics of an enterprise. We produce artifacts such as lists, drawings, documents and models. These artifacts describe the logical organization of business functions, capabilities, processes, and systems; people organization; information resources; software applications; computing capabilities; information exchange and communications infrastructure within the enterprise.

S4 supports the development, documentation and analysis of partner nations current EA and makes recommendations to leverage the architecture framework process to enhance security, performance, interoperability and to identify capability gaps and opportunities for technology leveraging and sharing in support of current and future mission requirements. We conduct analysis to capture operational linkages, tactics, techniques and procedures (TTPs) to support development of C4 Communications & Information Sharing and knowledge management. S4 supports the development of EAs, and designs and validates information sharing / knowledge management processes and tools for USNORTHCOM’s leadership role in the North American Maritime Security Initiative (NAMSI). We offer focused analytical recommendations, enterprise architecture drafts, and prioritized actions and recommendations for future investments.