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Awards



- 2021 Charleston, SC Engineers Council Technical Project Team of the Year
- 2021 - Top Places to Work Washington Post
- 2021 - Best Places to Work In South Carolina
- 2020 G2Xchange Disruptive Technology
- 2020 NAVWAR Lighting Bolt
- 2020 GovWin Top 6 Small Biz EHR
- 2019 NAVWAR Lighting Bolt
- 2013 Red Hat Innovation Best Middleware Application

1 MDACA.io & Data Fabric Capabilities

SpinSys has created a Multiplatform, Data Acquisition, Collection and Analysis (MDACA)

Product – A secure, unified Big Data suite with centralized near real-time acquisition, storage, and single view access to enterprise-wide repositories across data fabric architectures. MDACA.io creates an end-to-end solution for multi-sourced data collection (structured or unstructured), integration, harmonization, storage, metadata management, lineage tracking, governance, data virtualization and AI/ML driving to bring real-time data insights to customers.

MDACA – Inter-Cloud, Multi-Cloud, Hybrid Cloud Migration and Hosting - SpinSys is a vendor-agnostic provider of private and public cloud migration of legacy applications uniquely poised to help leverage cloud-native resources, integrate our customers solutions with cloud-based applications, and provide secure hosting. As an industry pioneer for Inter-Cloud management, our technology enables our customers to not only centrally manage the movement of enterprise-level data between different cloud providers but through a hybrid approach for on-premise solutions, making it the ultimate management concept.

MDACA Cloud Explorer (for Optimization) – SpinSys' Cloud Storage Explorer is a web-based file explorer that is designed to manage files across a wide range of cloud storage providers through a single integrated solution. This includes Amazon Web Services (AWS) S3, Microsoft Azure Blob Storage, Google GCP Cloud Storage, SharePoint

Document Libraries, and Windows and Linux shares. It is designed to take advantage of cloud-native services while considering cost optimization approaches that help our clients increase productivity and reduce service costs.

MDACA Data Migration – SpinSys provides a comprehensive range of cloud services including the stabilization and migration of legacy enterprise application and services to the cloud. This includes developing migration plans and roadmaps, refactoring applications to take advantage of cloud features and developing new cloud-based options to migrate legacy applications into a public or private cloud.

MDACA Big Data Virtualization - Big Data Virtualization (BDV) offers a modernized approach to data integration while minimizing persistent data stores and associated costs. It serves as a logical data layer that combines all enterprise data to produce real-time information for business users. Core features of the logical layer include the ability to:

- **Conceal Complex Technology:** By leveraging a logical layer to access data, users and applications only interact with the user-friendly interface of the BDV. The logical layer serves as a mask so that the complexities occurring behind the scenes remain undisclosed to the user.
- **Standardize Queries:** Data scientists, database developers, and application developers can leverage standardized queries, rather than having to tailor multiple queries to the underlying databases.

- Connect:** Enterprise data across disparate systems are linked together, including data stored within enterprise cloud applications, data warehouses, repositories, and data marts. Linked data is not copied into another environment. Data is connected, not replicated; therefore, data copies are not being created and migrated into another environment.
- Integrate/Federate:** Data is logically integrated, regardless of format, latency, or location. Logical processors are constructed to perform a number of complex tasks, including data transformations and data abstraction. As previously stated, the technical complexities performed at this level remain completely hidden from end users via the logical layer.
- Security:** Data is secured through one centralized location that is integrated with enterprise identity management solutions.
- Accessibility:** By providing a single, centralized, managed, and secure mechanism to view enterprise data, users can easily access and understand the information being delivered.

MDACA Mobile and Internet of Things Secure

Communication Gateway – The SpinSys-developed gateway provides authentication and authorization between a mobile/IoT device and the enterprise Identity and Access Management (IdAM) server leveraging certifications and smart card technology provided by our clients.

MDACA Mobile Development Platform - Our mobile application platform supports both native and progressive apps in the healthcare and analytics domain with two-way Secure Sockets Layer (SSL) communication and pre-built libraries (software development kits [SDKs]) to reduce development timelines.

MDACA Enterprise Artificial Intelligence Libraries - Our Enterprise Artificial Intelligence (EAI) libraries include the industry's leading open-source machine learning libraries designed to support health-related AI applications such as the analysis of the relationship between prevention and treatment techniques with patient outcomes.

All technology solutions currently deployed supporting both the Naval Information Warfare Center- Atlantic and

the Defense Health Agency in their efforts to modernize and centralize all data operations

MDACA Big Data Management and Enterprise

Repositories - The Defense Health Agency (DHA) uses MDACA, winner of the 2013 Red Hat Best Middleware Implementation Award, to support its mission of developing an enterprise data mart from their multiple electronic health records (EHRs) (legacy created and Cerner) and other independently sourced data. MDACA consolidates, extracts, and provides over 7.5 billion medical data transactions per day, in near real-time, from various military health care facilities to provide quality of care analysis, health analytics applications, early detection of epidemics and disease trend analysis with the flexibility to provide or design enterprise common data models and harmonization protocols.

2 Health Information Exchange (HIE)

Agile Core Services Data Access Layer (ACS DAL) –

SpinSys performs requirements analysis, technical support, system engineering, cybersecurity, system integration, and development in support of ACS DAL, which is an integration platform that provides a single, scalable architecture for the exchange of messages between internal systems and external systems. ACS DAL has three primary functions: application integration, data integration, and business rules management.

SMART on Fast Healthcare Interoperability Resources

(FHIR) – SpinSys prototyped SMART on the FHIR interface allowing innovators to create apps that seamlessly and securely run across the healthcare system. Using an electronic health record (EHR) system or data warehouse that supports the SMART standard, patients, doctors, and healthcare practitioners can draw on this library of apps to improve clinical care, research, and public health.

Enterprise Data Virtualization (EDV) -

SpinSys provides data visualization, subject matter expertise, data architect, and data warehousing expertise to develop comprehensive data abstraction, integration, federation, transformation, and delivery capabilities that combine data from one or multiple sources into reusable and unified logical data models.

These solutions are actively supporting the Defense Health Agency (DHA) with the following projects:

- **DAVINCI** – *SpinSys provides interoperability subject matter expertise, engineering and project management that provides the Department of Defense (DoD) and the Department of Veterans Affairs (VA) a consolidated clinical data repository that is accessible by both to support patient management as they move between healthcare systems*
- **Cerner Data Exchange** - *SpinSys supports integration and interoperability efforts by providing military data specific subject matter experts, data architects, systems engineers and support the collection and harmonization of the new Cerner EHR data to the DoD's legacy EHR data and other support data required for enterprise level reporting and monitoring efforts*
- **DHA Data Fabric** – *SpinSys supports the DHA's data fabric by providing data virtualization, data architecture and data warehousing expertise for data abstraction, integration, harmonization, data modeling and data delivery of combined data for unified decision making across the entire enterprise for:*
 - **Military Health System Population Health Management**
 - **Hearing Center of Excellence**
 - **Patient Safety Monitoring and Security**
 - **National Intrepid Center of Excellence (for TBI and PTSD Care Management)**

3 Registries

Patient Registries - SpinSys currently leads the architecture, development, and support of DHA's efforts to develop over 50 health registries which identify patients in need of potential clinical preventive services, disease management, or case management. SpinSys provides health care professionals and researchers with first-hand information about patients with certain conditions, both individually and as a group, to increase the understanding of the treatment of those conditions over time. SpinSys supports many registries including Antidepressant Med Management, Anxiety, Asthma, Back Pain, Breast Cancer Screening, Cardiovascular Disease Risk, Cervical Cancer Screening, Children with Pharyngitis, Children with URI, Hearing Loss and Auditory System Injury, Chlamydia Screening, Cholesterol in CVD, Colon Cancer Screening, COP, Depression, Diabetes, Health Services, High Risk Admissions, High Utilizers, High Utilizers Summary, Hypertension, Immunizations,

Lipid Panel, and Opioid Management.

4 Portal and Collaboration Sites

SharePoint Information Portals - SpinSys performs requirements analysis, technical support, system engineering, cybersecurity, help desk support and subject matter expertise in support of enterprise level SharePoint Information Portals. Our design provides the capability of hosting and managing comprehensive portal applications on a common platform providing an enterprise platform for business analytics, case management, applications and team collaboration.

Statistics – SpinSys offers maintenance and support for Statistics sites within the information portal that are a collection of standardized indicators that are measurable characteristics used to describe things including: population health, project success metrics or other items of interest based on the needs of the user community.

Training - SpinSys provides collaboration functions within the information portal that can be customized to leverage unique organization needs. This could include text, video, virtual reality, presentation based or workflows to track progress of successful completion of training objectives.

Dashboards - SpinSys provides support for dashboards within information portals that are designed to provide organization operations to help evaluate efficiency and effectiveness of specific activities. It also provides a means to monitor and improve processes with updates as often as needed to provide the necessary information for decision makers.

Secure Work Site - SpinSys provides maintenance and support for Secure Work Sites in information portals that can be restricted to specific groups or departments within the same enterprise level information portals so there would be no need for the additional platforms to meet those needs.

Enterprise Usage Analytics – SpinSys designed, developed, and supports data collection from multiple enterprise SharePoint farms to provide executive level dashboards, data analysis tools, and reports designed to show detailed usage metrics from the program to application levels.

This is demonstrated by our work within the DHA on:

- Medical Health System (MHS) Dashboard** – provides a core set of enterprise level measures for monitoring and improving patient access, quality of care, patient safety and disease management. This shared service dashboard is an ongoing collaboration driven by the Secretary of Defense to establish clear enterprise performance goals with a standardized measurement tool to support continuous improvement. SpinSys advanced big data and web development techniques to provide a cutting-edge analytical tools for use.
- Air Force Commander's Heads-Up Display (HUD)** – that supported specialized, secure, interactive dashboards which provided metrics designed to provide quality of care analysis for wing commanders throughout the United States Air Force (USAF) to help evaluate the healthcare services provided to the people under their command.
- Air Force Medical Services (AFMS) Dashboards** – that provided a suite of risk-adjusted outcome metrics designed to present a clear understanding of the quality of medical care being provided in a given MTF facility by the staff and clinics services they provide.

5 Referral & Case Management

Referral Management System (RMS) - SpinSys has designed and developed multiple systems that manage the workflow of military patient referrals between patient treatment and insurance providers. In doing so, SpinSys has worked closely with different health insurance providers to transition them from a fax-based system to a pure service oriented/messaging-based system leveraging HL7. The process enables them to manage military contracts based on guided care and Right of First Refusal (ROFR) determinations while also providing leaders and decision-makers global oversight and data on referral management processes allowing them to identify areas/tactics for better integrated care and reduced health care costs.

Case Management - SpinSys designed, developed and currently supports Military's National Intrepid Center of Excellence (NICoE). This is a national case management program for military service members designed specifically to work towards the advancement of the clinical care, diagnosis, research and education of military service members with traumatic brain injuries (TBI) and psychological health (PH) conditions. Our support delivers on cutting-edge objectives in the areas of Patient Referral Processing and Case Management to include the scheduling of the right providers, patient appointments, and needed resources. This tool tracks these patient referrals as they go from diagnosis to ultimately the determination of eligibility for patient program admission to discharge.

Legal Case Management - SpinSys has developed a comprehensive solution to perform legal Case Management that not only tracks information needed for legal expenses but a revolutionary method of using NLP to search relevant police, medical, statements and other legal information to target faster and more complete understanding actions needed for client specific cases.

6 Health Infrastructure and Security

Managed Services and DevOps – SpinSys provides the DoD with technical operations and sustainment support to include full operations, management, sustainment and administration of all enterprise servers, applications, network and resources for enterprise Health information Exchange systems and Enterprise Data presentation solutions.

Information Assurance (IA) – SpinSys leads multiple Information Assurance efforts which leverage multiple security standards in support of security certifications and Authority to Operate (ATO) accreditations. We have extensive experience in compliance frameworks including those most used by Federal agencies like: RMF, FISMA, DIACAP, FedRamp and DCID to support in the design, architect and implementation of the proof of concept for enterprise level roll-out.

Small Business Contract Vehicles

SeaPort NxG GSA MAS Navy IWRP OTA Army C5 OTA



ISO 20000:2018, ISO 27001:2013 AND ISO 9001:2015

Let's Talk

www.spinsys.com | (703) 318-0803

📍 3120 Fairview Park Drive, Suite 800 | Falls Church, VA 22042

📍 4401 Leeds Avenue, Suite 300 | North Charleston, SC 29405

📍 300 Convent Street Suite 1330 | San Antonio, TX 78205