



Solutions for OT, IT, and Quality Assurance

Our expertise - quality affecting and safety significant systems and software, built for the DOE Complex and its Contractors via task-based solutions and staff augmentation.

Although InfoTech NorthStar may appear new, our team has been actively working in the DOE-Complex since 1996, and we've developed extensive experience supporting noteworthy projects. For instance, the successful deployment of the Tank Side Cesium Removal (TSCR) system at the Hanford Tank Farms. Additionally, the design, implementation and maintenance of the eTools, web-based software applications used for mission-critical administrative tracking of TSRs and LCOs, keeping electronic facility log books, and operating data acquisition systems at the Hanford Tank Farms.

Our expertise in Operational Technology (OT) and Information Technology (IT) has enabled us to develop over 30 active applications and control systems that are currently in operation in the DOE Complex. And we have a full, robust NQA-1 program too, with a full Subpart 2.7 implementation! In addition, we offer our clients our copyrighted Theseus line of Quality Assurance services and training, which are certified by ASME and designed to help guide you through NQA-1, both on-line and classroom style.

Whether you're looking for assistance with a turn-key task or seeking expert advice to assist in achieving your goals, the InfoTech NorthStar team is here and ready to provide results.



TASK-BASED SERVICES AND SOLUTIONS, AND STAFF AUGMENTATION AVAILABLE

OPERATIONAL TECHNOLOGY (OT)

- PLC and DCS Design and programming, HMI Design and programming, including ABB and Allen-Bradley
- Safety Software design and development, and full Software QA Lifecycle documentation
- UL 508A panel design and component selection, full skid design and delivery available on request
- Instrumentation and Control Systems Design, Instrumentation Specification and Design, and Setpoint Calculations
- Licensed Electrical and Control Systems Engineering Services
- Drawing preparation: P&ID, Loops, Electrical Elementaries, Communications, General Arrangements, and One-Lines
- Factory Acceptance Testing, Construction Acceptance Testing, Operations Acceptance Testing, and Procedure development
- ISA/IEC-61511 Expert (ISA-84) Safety Instrumented System Design, SIL Calculation experts on staff, FMEA studies

INFORMATION TECHNOLOGY (IT)

- Full software lifecycle practices, including AGILE, for development of functional solutions to your Company's QAP requirements
- Full .NET web-based (mobile), full-stack, software development phases for greenfield (new) applications utilizing Angular, ASP.NET, MicroServices, .NET Core, C# and JavaScript, including validation and testing, and start-up/training of users
- Rigorous configuration management and build process to support maintenance of existing applications
- Experienced in database design and implementation including SQL, SSAS, SSIS, SSRS
- Experienced in Entity Framework (EF), AWS, Microsoft Azure (Cloud-based, FedRAMP-certified)
- Experience with Power BI and other dashboards to track business, engineering, and operational performance to meet Business Intelligence (BI) objectives
- Systems integration for sharing key data to the right people at the right time to accelerate mission performance

SOFTWARE QUALITY ASSURANCE (SQA)

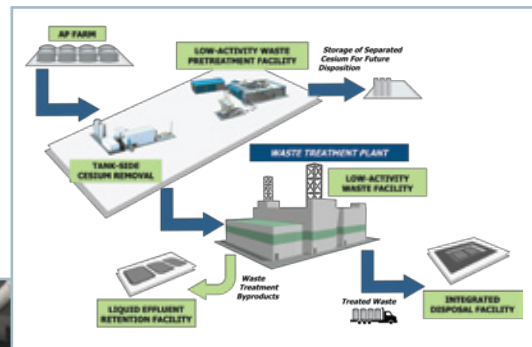
- ASME NQA-1 including subpart 2.7, DOE Order 414.1-D, DOE G 414.1-4, Safety Software Guide (for use with 10 CFR 830, Subpart A, QA Requirements, and DOE O 414.1C/D, Quality Assurance)
- Expert level on Safety Software/SQA for OT, including SQA for high level Nuclear Waste processing facilities and purpose-built tank side assemblies and skids
- Expert level on Safety Software/SQA for IT, including SQA for administrative and tracking of technical safety requirements (TSR) for operational high level Nuclear Waste processing facilities and sites for purpose-built tank side assemblies and skids
- SQA Program reviews, studies and preparation assistance including full refactoring
- SQA Surveillance and Audit support preparation assistance and defense

ENTERPRISE ARCHITECTURE (EA)

- Implementation of a company's Enterprise Architecture (EA) using the Federal Enterprise Architecture Framework (FEAF) to support DOE Order 200.1A for information technology management
- Includes FEAF taxonomy for business/data/application/infrastructure categorizations
- Experience with EA software such as ABACUS software features and functionality, reporting, and modeling; data interpretation and analytics
- Guidance and consulting for related strategies; including EA management for communication(s) planning and process maturity for both EA and data management practices

PROJECT MANAGEMENT FOR ALL IT AND OT TASK-ORIENTED SOLUTIONS

- Budget, planning and schedule support
- Status and project team integration support
- Facilitation of project meetings utilizing Value Engineering and Systems Engineering techniques



Ecology inspection inside TSCR Process Enclosure ▶

An inspector takes a close-up look inside the Tank-Side Cesium Removal System's process enclosure during construction certification in September 2021. InfoTech NorthStar personnel assisted in all phases of this project including design, commissioning and operational startup.

Built for companies with the highest standards, including yours.

