

SPeialized Infrastructure Data Enterprise Reporting System (SPIDERS)



Technology Description

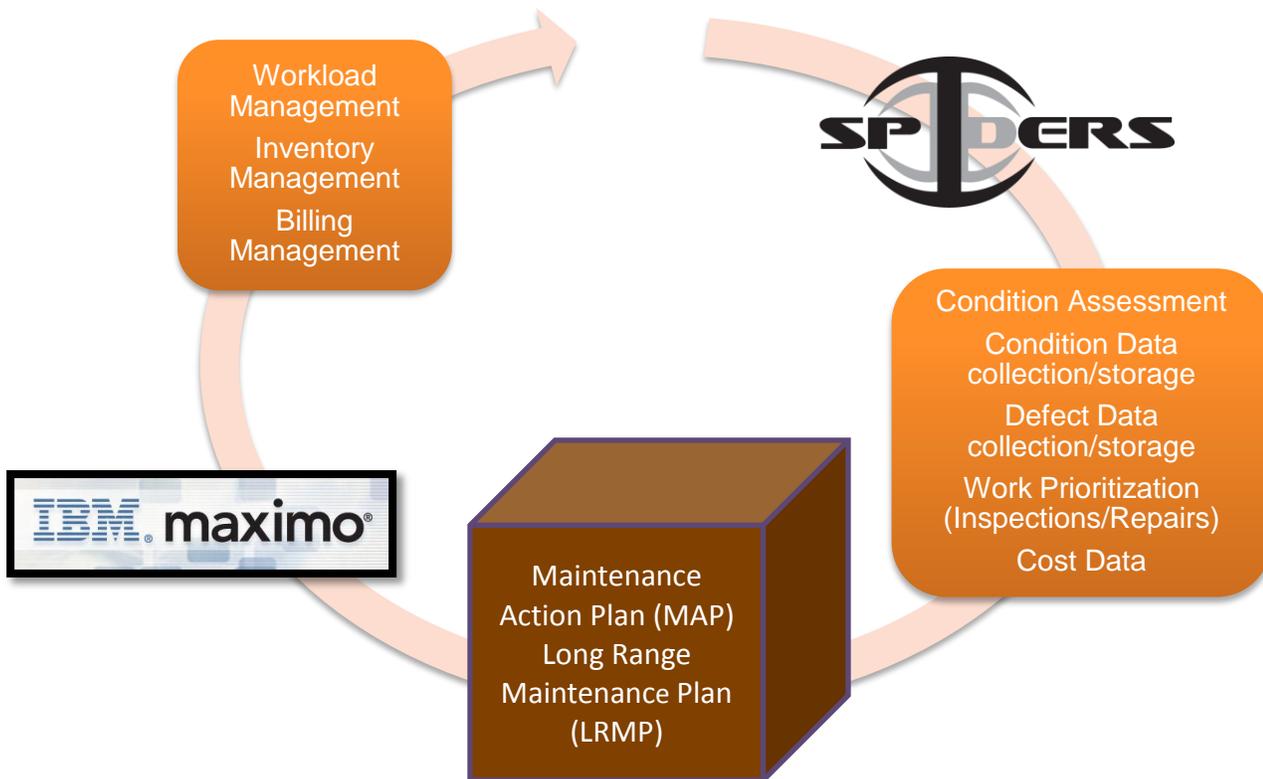
NAVFAC EXWC developed an Oracle-based engineering management system for specialized Navy facilities such as bridges, dams, dry docks, waterfront structures and water tanks providing efficiencies and standardization that benefit NAVFAC business lines. SPIDERS received authorization to operate in June 2012 under the NAVFAC portal.

For asset management purposes, Condition Ratings (CIs) at the facility and component levels will be reported to MAXIMO, NAVFAC Public Works maintenance management software application, via flat file transfer (approval and implementation of an electronic link is currently being pursued). Deficiencies and associated rough order magnitude (ROM) costs, where applicable, will be transferred to MAXIMO for establishment of Service Requests.

The screenshot shows the 'Facility Book' interface with a 'Download Deliverable Files' section. A dropdown menu is set to 'WHARF (311)' and 'Photos'. Below is a table with columns: UFII, ASSET TYPE, PHOTO ID, CAPTION, PHOTO TYPE, and PHOTO. The first row contains the following data:

UFII	ASSET TYPE	PHOTO ID	CAPTION	PHOTO TYPE	PHOTO
H101001		3.1-2	Wharf 311 - View of typical 20 inch octagonal concrete piles above water. Note previous epoxy injection repairs at tops of two nearest piles.	Typical	

Deficiency Reporting in SPIDERS Facility Book



SPIDERS/MAXIMO Data Flow

For technical management purposes, collection of component level performance data in an ocean environment will support future performance models.

For project management purposes, collection of actual cost data relative to ocean-related inspection efforts and various specialized asset installation and repair efforts is supporting development of unit costing for IGCE support and sustainment model refinement of applicable asset categories.

For other NAVFAC product lines, SPIDERS is a DIACAP-approved government-off-the-shelf (GOTS) system that can support various business processes within the NAVFAC IT Portfolio.

Value to the Warfighter

Reports and information found in SPIDERS provides the Public Works Officer (PWO) and Installation Commanding Officer (ICO) the engineering detail to prioritize repair needs for specialized facilities in their area of responsibility. Although detailed and thorough, these reports typically identify the basic extent of the deficiency of facilities and may require additional detailed inspections to develop designs of repair. Also identifies when the next inspection is planned for a given Activity over the Future Years Defense Program (FYDP).

Economics of the Technology

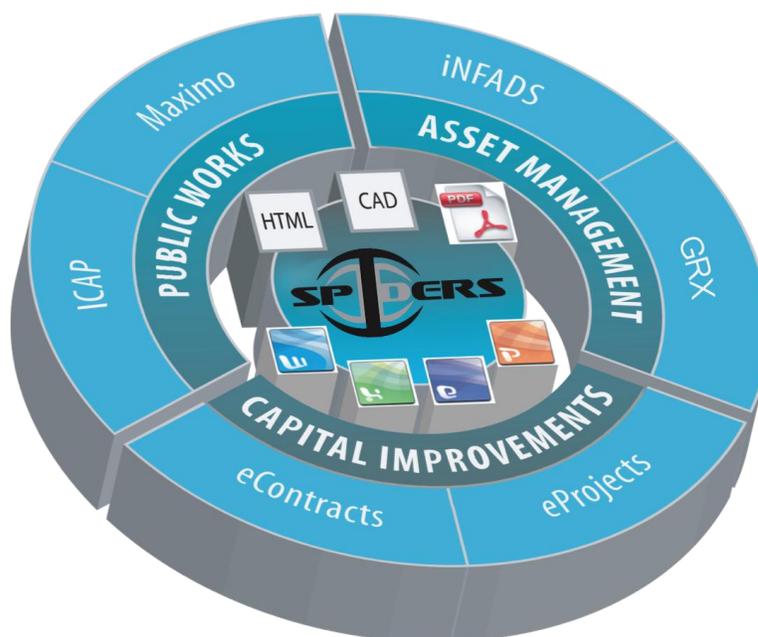
The establishment of a standardized electronic data collection and report generation system for waterfront assets has shown an annual cost reduction of approximately 20 percent of program costs. The application of these electronic business processes will be applied in part or in whole for the remaining specialized assets inspected by the Ocean Facilities Division.

Site Implementation

SPIDERS moved to the production environment within NAVFAC portal. Access to the library and facility book modules is allowed to all Department of Defense and NAVFAC personnel with a valid CAC (Common Access Card).

Specific Applications

The data resident in SPIDERS is used by NAVFAC HQ PWBL (Public Works Business Line) for reporting waterfront, bridge, dry dock and waterfront facility condition ratings. CNIC (Commander, Navy Installations Command) has utilized general berthing pier inspection cost data to update their sustainment cost model. Local activities and NAVFAC's waterfront integrated product teams can utilize the library to obtain inspection reports for various locations worldwide.



SPIDERS

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