

Swiftships Automated Supply Management System SCMS D365

Defense Contract Management Agency (DCMA) Certified Software Platform for Integrated Inventory and Maintenance Management











Introduction

Swiftships Supply Chain Management System (SCMS) provides Program, Production, Procurement, Warehousing, and Maintenance Management using a Computerized Maintenance Management System (CMMS) built on the Department of Defense (DoD) supply chain principle using Microsoft Dynamics 365 (D365) Enterprise Resource Planning (ERP) software platform that centralizes inventory and maintenance information and facilitates the processes of maintenance operations. It helps optimize the utilization and availability of physical equipment like vehicles, machinery, communications, plant infrastructures, and other global assets for US Government and Commercial clients.

Key Features

Over 20 Modules

across program management, planning, production, inventory, warehouse, and integrated logistics

IoT Intelligence

SCMS is based on Internet of Things (IoT) web 4.0 technology

DoD Approved

certified by Defense Contract Management Agency (DCMA)

Full Integration

with 3rd party and web-based applications

Improved Performance

efficient resource management, real-time availably and faster response

Multi-Language

customizable to meet the needs of multiple nations, and includes support for multiple languages

Operational Readiness

automation to keep the fleet mission-ready at all times





Real-time Information for Intelligent Decision Making

Our critical methodology is focused on efficiently and effectively providing Logistics and Supply Chain Management (SCM), and the platform is customized for Shipbuilding and Maintenance operations management. Swiftships' automated SCMS is certified by Defense Contract Management Agency (DCMA).

Swiftships SCMS journey begins with the Project Manager using the system to manage CONUS or OCONUS programs. The Project Management module tracks IMS and the daily in-and-out material flow on different projects. In addition, to the PMs – our Integrated Logistics (ILS) and Product Support teams use this tool to provide material/equipment product details, spare parts, or warehousing management. At the same time, the Purchasing team uses a procurement module to generate Purchas Orders (PO) for the Bill of Material (BOM) programmed by the Engineering team since the system can support a full spectrum of material procurement from spare parts to preventative maintenance, as shown in Figure 1.



Figure 1: Swiftships SCMS decision-making and reporting

Swiftships SCMS D365 ties together real-time financial reporting with Asset, Inventory, Master Planning, Product Support, and ILS Management. Its principal value driver is its distributive inventory process, where the system matches the demand and real-time information for intelligent decision-making during tracking. The platform enables one source of truth across the entire enterprise, allowing for company-wide visibility, decision-making, and reporting.

Enterprise Asset Management

Swiftships' SCMS is an advanced asset management system that integrates seamlessly with custom modules. Its advanced asset management supports many numerous industries. For example, Follow-on-technical Support (FOT) of the Iraqi Fleet in Iraq, where team Swift performed Preventative and Corrective Maintenance support; in addition, US Army's SLEP effort in managing On-cycle Cyclical Maintenance (OCCM) efforts. In short, it enables the user(s) to efficiently manage and carry out project management and maintenance repair overhaul (MRO) activities regardless of location – as shown in Figure 2.

MICROSOFT DYNAMICS 365 ASSET MANAGEMENT	ACQUIRE	MANAGE	(MAINTAIN		RETIRE
	Acquire Fixed Assets	Functional Locations	Breakdown Maintenance	Budget & Cost Control	Dispose off Fixed Assets
	Capitalise Fixed Assets	Multi-Level Asset Structure	Preventive Maintenance	Schedule Board	Electronic Reporting
	Transfer, Revolve, Split Fixed Assets	Asset Register	Analytics & KPI's	Mobile Execution	
	Depreciate Fixed Assets	Spare Parts Control	Maintenance Checklists	Asset History	
	Derived Books	Maintenance Schedules	Fault Management	Maintenance Rounds	
Microsoft Dynamics 365	Financials	Supply Chain (SCM)	Field Services	Customer Services	Mixed Reality
Power Platform	Common Data Service	Power Apps	Microsoft Flow	Power B	31
Microsoft Azure					

Figure 2: Swiftships SCMS Enterprise Resource Management



IoT Intelligence

Swiftships SCMS is based on Internet of Things (IoT) web 4.0 technology. The system's intelligence uses signals from data using the Supply Chain Management methodology to produce actionable insights like Production delays, Equipment downtime, and Product quality, as shown in Figure 3.

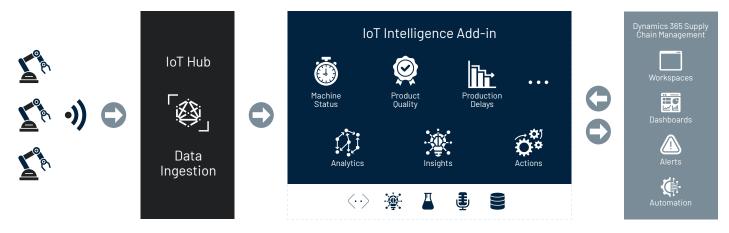
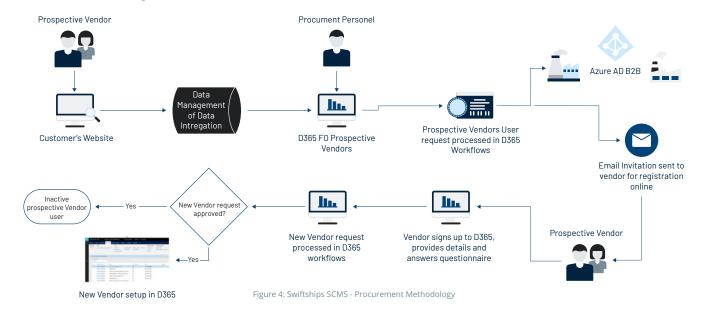


Figure 3: Swiftships SCMS IOT & Web 4.0 Technology Paradigm

Procurement and Sourcing

Swiftships D365 SCMS integrates all steps of the procurement and sourcing processes through a single application. Embedded tools for spend analysis, supplier performance management, and real-time vendor collaboration provide you with the actionable intelligence needed to maximize the effectiveness of your purchasing and sourcing processes, as shown in Figure 4.



Enterprise Asset Management

Streamlines and optimizes the procurement processes by using a single application to collaborate with vendors seamlessly, manage contracts, onboard them, and monitor performance like on-time delivery and quality

Purchasing Policies

Realizes maximum cost savings by ensuring that negotiated pricing is automatically leveraged across workflows based on purchase policies defined for specific business needs

Product Ordering

Accelerates the procurement of direct and indirect supplies by integrating seamlessly in real-time with vendor catalogs

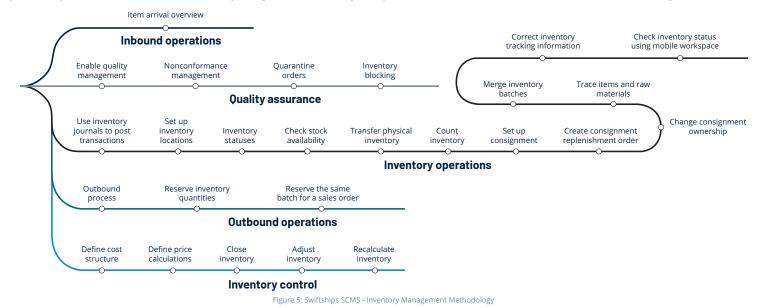
Cost Analysis

Leverages spending data to identify trends and potential areas for cost-saving initiative



Inventory Management

Swiftships SCMS inventory management software tracks, manage, and organizes inventory levels, orders, sales, and deliveries. The inventory management module allows WH teams to maintain an optimal inventory level, track goods during transport between locations, receive new items, manage warehouse processes such as picking, packing, and shipping, prevent product obsolescence and spoilage and ensure your products are never out of stock. As shown in Figure 5.



The inventory management system provides the ability to maintain accurate measures of inventory/spare parts across regions before placing inventory orders

- Monitor and reorder stock based on prior projected usage
- Automatically tracking inventory levels with each delivery or following a service call or appointment can also help to improve operational efficiency
- Identify defective, outdated, or unnecessary parts to improve quality and reduce costs
- The system provides a method for technicians to request parts which gives the ability to manage part requests with a link to work order and provide supplier part order information
- Preserving enough inventory to handle future demand without placing unnecessary strain on storage spaces and Multi-Warehouse/Office Capability
- Managing part details like extensive serial numbers, warranty schedules, attaining cost, and setting maximum and minimum inventory levels
- Ability to reorder on an emergency basis while technicians are on the field

Warehouse Management

Swiftships SCMS features robust warehouse management that helps clients modernize their warehouse operations. This module has a wide range of features to support the warehouse facility at an optimal level at any time. Warehouse management is fully integrated with other business processes such as transportation, manufacturing, quality control, purchase, transfer, sales, and returns. The benefits of warehouse management in Supply Chain Management include:



- Obtaining a complete overview of inventory to help improve project requirement
- Streamlined warehouse processes to reduce costs
- Process-based transactions for faster with a mobile device
- Provide logs of every movement, cycle count, sales pick, transfer

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Figure 6: Swiftships SCMS – Warehouse Methodology & Output

These options can include specific instructions for each warehouse, for products or groups of products, and quantities on order. The system can be set up to require warehouse workers to follow detailed processes for inventory handling (at specific locations if needed). It can also give warehouse workers the authority to make independent decisions, depending on the worker, as shown in Figure 6.