CASE STUDY

OSPREY Software Development

Raytheon's Advanced Logistics and Configuration System

The Advanced Logistics and Configuration System (ALCS) built collaboratively by Raytheon and Osprey, provides Raytheon with a consolidated view of the status of all equipment and parts inventories at multiple sites around the world.

- ALCS tracks millions of parts and thousands of configurations.
- ALCS provides a consolidated view of parts inventory and work orders at world-wide deployments.
- ALCS supports mission-critical operations in a variety of difficult environments.

Raytheon develops and supports advanced radar systems, missile systems, and other sophisticated military systems that are deployed around the world—which means these systems must be 100% functional and ready at all times.

Each system can have thousands of unique parts, and these parts have specific compatibility requirements with other parts, based on each system's unique configuration.

Raytheon

When a system needs a replacement part, Raytheon tracks the work orders and parts inventories from a central Materials Consolidation Point (MCP). A major challenge to the efficiency of the overall operation arose because different locations were running disparate legacy systems and databases. In some cases, intricate spreadsheets had to be created by hand and emailed to the MCP for manual uploading to the central MCP application.

To eliminate this problem, Osprey created ALCS using the .NET Framework and SQL Server with replication. Now, even with disparate databases, the central MCP gets a consolidated view of the status of all equipment and parts inventory.

Raytheon must also track thousands of system configurations, each requiring a unique combination of compatible parts. The Defense Department audits these configurations several times during the course of a year. In the past, these audits have often required a highly-manual review process that could take weeks or even months of preparation.

To solve this problem, Osprey integrated configuration validation into the maintenance and parts inventory, so that any configuration could be conveniently viewed and examined as needed.

Osprey also developed an executive dashboard that allows multiple operating locations to create reports and track open orders in real time.

The net result: major improvements in efficiency and speed of repairs, significant cost savings and superior inventory management.