NACMA



« Lascom ICS provides us with a most flexible framework for the automation of our business processes and enables us to exchange information using state of the art technology » Dirk Wessel - NACMA ACCS Configuration Management Engineer

NACMA

NACMA (NATO Air Command and Control System Management Agency) is a NATO Agency whose principal task is to conduct the procurement, central planning, system engineering, implementation and configuration management for the NATO Air Command and Control System (ACCS) Programme. The Agency currently employs around 100 people from several NATO nations.

ACCS Programme

The Programme aims to provide a fully unified and interoperable Air Command and Control system with deployable elements and intends to replace existing air defence systems in NATO Europe, such as NADGE, GEADGE, and STRIDA.





Why NACMA has chosen Lascom ICS?

To improve the control of ACCS Programme and to coordinate changes with all member nations and NATO organizations, NACMA has to use a configuration management tool allowing to:

- Provide traceability from requirements through test results to physical configuration items (Hardware, Software and Firmware) including external interface management.
- Know the status of the system at any time.
- Track all the changes on the operating equipment.
- Manage the applicable documentation and provide online creation, modification and change control mechanism.
- Administrate all related procurement contracts.

The final goal is to share the ACCS system baseline within NATO.

NACMA has chosen Lascom ICS amongst several PLM tools for its fully flexible framework and its ability to manage all their configurations and specific use cases (baseline, configuration management, engineering changes...). This flexibility, to easily adapt Lascom ICS to the various business processes used, was considered to be one of the reasons for selecting Lascom ICS.

NACMA's Lascom ICS key figures:

- Over 100 000 contractual and technical documents
- 150 000 managed references (80 Gb)
- 120 000 additional references with IIMD database
- 50 different types of items
- Around 100 users



Lascom ICS solution

NACMA's Lascom ICS application is the central repository of all ACCS data. It is the interface for all the participants of the Programme, wherever they are located:

- ACSI (JV Thales/Raytheon): Prime contractor
- NACMA (NATO Agency): Procurement, Central Planning, System Engineering and Configuration Management.
- NPC (NATO Agency): Software Support Centre
- NAMSA (NATO Agency): Maintenance and Supply
- And of course all the NATO nations part of the ACCS programme.

To allow the management and follow-up of the Programme, Lascom ICS proposes numbers of key features:

Configuration management

Configuration management is the key feature of Lascom ICS: this is the management of the configuration breakdowns of any kind all along their lifecycle (as designed, as delivered, as documented...). Lascom ICS can manage an infinite number of customizable configurations and includes standard functionalities:

- Baseline: Lascom ICS can record the image of a configuration of a system at a specific time and given conditions (as installed system for example).
- Configuration comparison: this functionality allows the comparison of 2 configurations. To analyze for example how a system configuration has evolved since a specific point in time.
- Impact analysis: Using the "Where Used" functionality the user can easily find all the elements impacted by a change or a technical event for example to support his decision making process.
- Automatic instantiation: allows creating an instance of a configuration with defined models; an important saving of time and a capitalization of know-how.
- Annex configurations: several kinds of configurations can be displayed simultaneously on a same page (as defined and as documented configurations for example) in order to bring a global view to the user.

Requirements management

Requirements management is a key element for NACMA: the Agency has to manage specifications that can contain a data volume of several thousands of requirements in a document of 3000 pages.

Within Lascom ICS, the content of specifications (requirements and free text) are managed though configurations. Lascom ICS ensures the follow-up of each requirement and does impact analysis of the change to a requirement through the whole specifications document.

The user can generate the specifications document directly from Lascom ICS using XML technology.

Engineering Changes management

An exhaustive Engineering Change (EC) management is essential for NACMA. The Lascom ICS standard workflow of EC management allows easily following the EC from its proposal to its application: each request, proposal, notification and application is linked to an EC folder and automatically impacts the repository after validation. This shows well the strong interaction between the technical data repository and the workflows, which is a key asset of Lascom ICS.

Benefits

Benefits brought by Lascom ICS are many:

- A powerful and exhaustive system configuration management.
- A unique data repository common to all the Programme participants.
- A complete and fully integrated Engineering Change cycle.
- A better traceability of information exchange between all the different stakeholders of the Programme.

Lascom ICS also integrates IIMD database, which is the interface and interoperability data between all the NATO and National ACCS sites and interfacing systems.



