Lascom
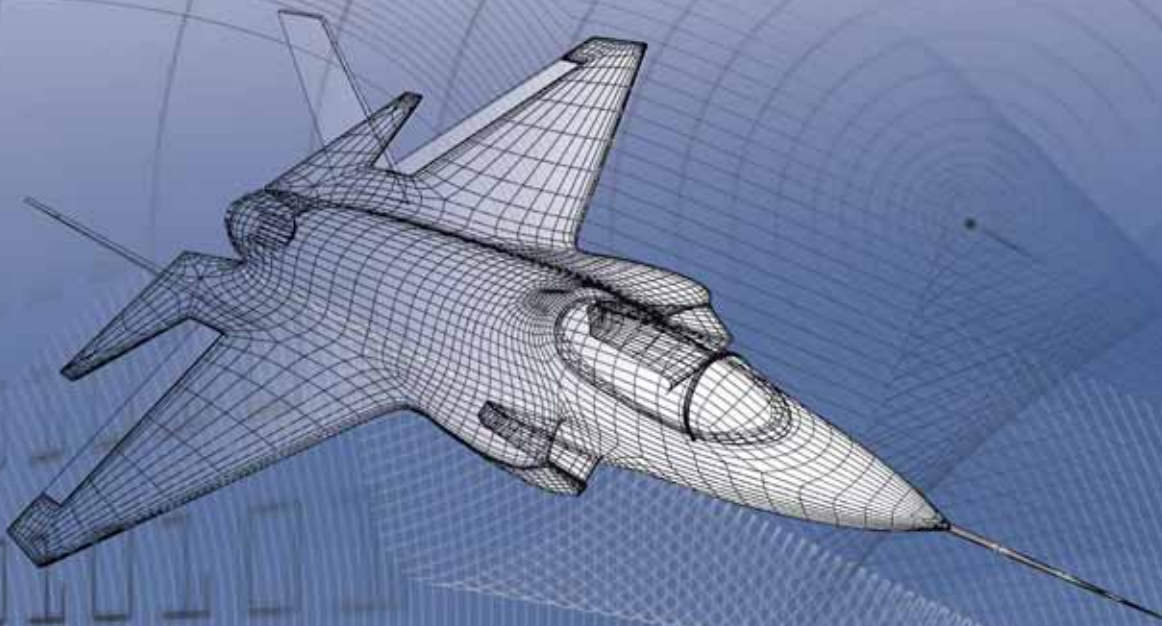## ICS

PLM software for complex program and system management

- Design, integrate and maintain complex systems

- Collaborate and exchange on programs and projects

- Manage changes and control systems evolution

Lascom
ICS

Lascom ICS (Industry and Complex Systems) is a PLM (Product Lifecycle Management) software solution created by Lascom. Founded in 1988, Lascom has more than 20 years of experience and significant references in this business (CNES, EADS, Alstom, Arianespace, NATO, PSA, DGA, Latécoère...).

Lascom ICS is focused on two main market segments:

1. Manufacturing - where Lascom ICS improves the productivity of the Design Chain, reduces business risks, manages change and controls quality.
2. Aerospace, Defence and Transportation - where Lascom ICS manages complex and critical systems (implementation and In Service Support) such as military ships, weapon systems, satellites, communication and control systems, embedded electronics, command and control equipment...

Challenges for Design Engineering

- Design products with efficient management of variants, complex hardware and software relationships, collaborate with suppliers, comply with customers requirements, rules and regulations.
- Share a single repository all system or product data, presented consistently no matter where in the world the user may be:
  - Documents and drawings of all types
  - Bill of materials from design tools
  - Supplier data
  - Full traceability of all changes and deviations impacting products

Challenges for In Service Support

Support your critical systems during their In Service phase and manage the Integrated Logistics Support:

- Reduce operational downtime: a grounded plane or faulty critical equipment represents huge financial loss that requires a quick and efficient response.
  - Anticipate downtimes for your systems
  - Track and replace failing parts as soon as possible
  - Globally visualise the status of your operational systems

- Maintain consistency of your critical systems and ensure traceability of changes

DESIGN

PRODUCTION

INSTALLATION

OPERATION & MAINTENANCE

Design Engineering

Our commitments

The need for Product Lifecycle Management software is most pronounced at the initial concept and product definition phase: numerous iterations occur before design is stabilized; large volumes of information have to be shared in the form of specifications, documents, configurations.
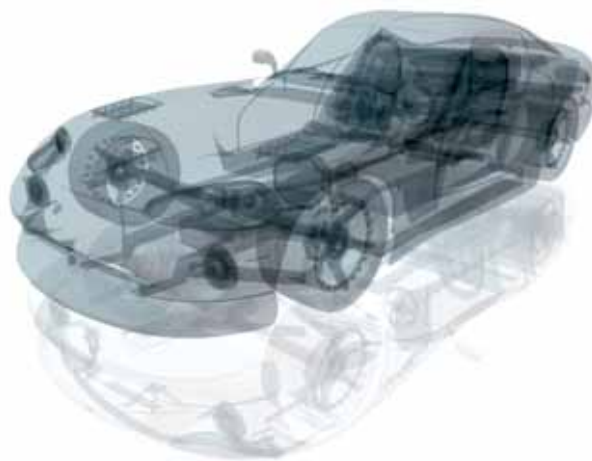
During design phase Lascom ICS enables your company to improve its competitiveness by reducing direct costs and rationalizing conception, industrialization and evolution cycles of the products.

Exchange and integration of technical data coming from different teams or suppliers (designers, engineers, project managers, customers, subcontractors...) are made easier and secured thanks to their sharing within the common repository. This repository is moved by business processes that help along information exchange and hide the whole complexity of data managed; each user is then focused on high added value tasks.

Key features

• **Reference configuration management:**
- Know at all times the accurate composition of products, manage "As Designed / As Built" configurations, set baselines, generate and track serialized items.

• **Engineering Change control:**
- Analyze impact of changes, manage deviations and retrofits...

• **Document management:**
- Centralize company know-how and associated data in a common repository, have at all times up to date and valid information, manage document lifecycles with status, version, history, revision...

• **Reporting – Project overview:**
- Have at any time a global view of your project, prepare project reviews, publish project related data, define specifications...

• **CAD integration:**
- Incorporate BOMs and data from different CAD solutions (mechanical, electronic...).

• **ERP interface:**
- Complete configurations and forward them to ERP. Simplify supply processes and configuration change management along with procurement and production constraints.

Focus on Engineering Change management

The Lascom ICS integrated engineering change management process helps our customers to easily follow all changes to their proposal or application: each engineering change request, proposal, notification and order is linked to an engineering change folder and automatically impacts configurations after validation.

You apply your ECs with a complete traceability in a short time while maintaining a global view. You control all the changes on your system using functional compatibility and interchangeability analysis.

An aeronautical manufacturer, dedicated to development, production and support of aircraft piston engines, is daily managing its engineering changes with Lascom ICS. For this manufacturer, it is prohibited to supply an engine that has not been certified by the FFA (Federal Aviation Administration) or DGAC (Direction Générale de l'Aviation Civile). To obtain these certifications, all information related to design department, test benches or support is gathered and managed in Lascom ICS. Each change to the applicable configuration of an engine is done through EC process in order to ensure reasons and originators of the modification are tracked. It helps the customer to increase productivity due to process automation and trust in changes to its systems.

Benefits:

• **Rationalize design costs**
• **Increase productivity thanks to process automation**
• **Control exchanges with customers and suppliers**
• **Strengthen your customers' confidence by demonstrating an exhaustive knowledge of your products**

In Service Support

⊣ Our commitments

Due to the complexity of your system and the variety of stakeholders of your program, you have to use a tool that helps you to follow up and share all your data.

Lascom ICS ensures consistency and reliability of all technical systems data. With Lascom ICS, you can effectively share data and collaborate with customers and suppliers in accordance with industry standards such as PLCS, AECMA, ATA...

Lascom ICS helps you to increase availability of your systems by providing permanent control of configurations and changes with an immediate impact analysis of a change to your system and its related documents.

⊣ Key features

- **Applicable/Applied/Maintained configuration management:**
  - Track and compare configurations, drive and control differences, manage variants and diversity

- **Fault monitoring and change follow up:**
  - Manage technical events, follow and track changes with impact analysis, process deviations and oversee review decisions

- **Support data management:**
  - Monitor maintenance tasks and plans, follow up on obsolescence and eliminations, have a view on interchangeability compatibility, spare parts and substitutes...

- **Capitalise on experience and feedback:**
  - Have a quality audit tool, increase experience and feedback, enhance best practices...

- **Regulation compliance:**
  - Manage applicability, comply with standards linked to traceability, track hazardous substances subject to special regulations...

- **Manage Field-installations:**
  - Track operating systems physical composition and their functional and geographical location.

⊣ Focus on 100% operational

In order to optimize and increase system availability, you need to immediately identify faults, technical events and failures in order to address them as soon as possible.

Experience and feedback, linked to accurate information, will greatly improve your control on logistic support data. You will be able to respond quickly by providing adapted modifications to maintenance plans and then better anticipate future failures.

Some cases studies:

- **Embedded electronics**
  - For a major railway manufacturer, Lascom ICS manages signalling systems at every level (platforms, equipment, documents ...). Track of changes to the system composition (mechanical parts, software, electronic boards...) is ensured as well as any impact on technical data or documentation.

- **Military communication system:**
  - For the Defence industry, Lascom ICS brings exhaustive traceability of all operations on military communication systems deployed all over Europe. Thanks to Lascom ICS precise knowledge of current systems configuration is maintained.

- **Processing changes in Aerospace industry:**
  - For the Ariane 5 launcher, Lascom ICS manages the whole process of change: configuration evolution follow up, traceability of reasons and originators of changes, board management, gaps management...

- **Weapon system:**
  - For a National Defence organization in charge of In Service Support for aeronautical systems and equipment, Lascom ICS manages the entire technical data repository and configurations. It tracks all changes along with their impact. Following this change process, information can be used for retrofit and maintenance tasks processes to improve corrective phase.

Benefits

- **Optimize systems availability**
- **Reduce maintenance costs**
- **Reinforce confidence in your equipment**
- **Justify applicability of the documentation**
- **Respond rapidly to any failure or defect**

Lascom ICS

4 main functional blocks

Technical data and document management

Lascom ICS gathers all the data in a secure, shared repository and offers you:

• User rights, user profiles and role definition
• Personalized access and intuitive searches
• Project data management
• Data lifecycle management
• Version, revision and history management
• Document viewing, editing and printing

Configuration management

Lascom ICS includes advanced configuration management functionality to help you:

• Know where used cases for all items and documents
• Track any action in the repository
• Manage technical events
• Manage spare parts and interchangeability
• Audit a system or a product (configuration baselines & comparison)
• Understand the consequences of a faulty or non conformant equipment
• Manage a complete change process: ECR (Engineering Change Request), ECP (Engineering Change Proposal) and ECO (Engineering Change Order)
• Analyze the impact of change
• Track the chain of decision leading to a change
• Audit differences between configurations
• Manage variants and effectivities (by date or by rank)
• Update applicable documentation for your systems and maintain history

Process management

With the Lascom ICS process engine you can drive complex data and document information effortlessly.

Lascom ICS improves the efficiency and visibility of key business processes through workflow with an easy-to-use web interface. Internal and external stakeholders can then more effectively collaborate on key areas.

Lascom ICS also provides powerful interaction between the technical data repository and workflow.
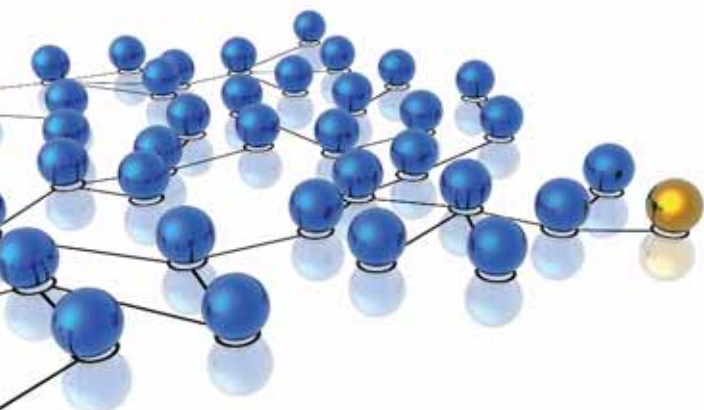
Lascom ICS has a full set of built in processes (technical event management, change management, retrofit management, maintenance task follow up…) that you can easily adapt to your specific needs. You can also recreate your own corporate processes in electronic format using Lascom ICS.

Reporting

Follow up on ongoing activities and operational control is essential.

Lascom ICS reporting tools provide you with an overview of the data and systems managed. You will be better positioned to understand potential bottlenecks and identify issues before they become business problems.

Using these reporting tools you will be able to create dashboards and reports to improve your business performance.

lascom ICS

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Lascom in brief

Lascom ICS software (product, project and program lifecycle management) brings together:
- A technical repository providing full featured document management (EDM)
- A complete set of configuration management functionality to structure your data
- A process engine that manages the evolution of the repository and improves in formation exchange between stakeholders
- Powerful reporting tools to create dashboards and reports to improve your business performance

To be close to its customers, Lascom is established in San Diego, Toulouse, Strasbourg and Saint-Etienne in addition to its headquarters in Paris.

Lascom provides also solutions for the following markets:
- AEC (Architectural Engineering and Construction)
- CPG (Consumer Packaged Goods)

Technologies

Simple
- Microsoft Internet Explorer, Firefox
- Microsoft Windows XP, Vista
- Full SOA (Service Oriented Architecture)
- Saas deployment

Robust
- Supports load balancing and high availability architectures
- Supports server farms
- Full Web architecture based on Microsoft Windows Server (ASP / ASP .Net with Microsoft COM+ / IIS)
- Data architecture based on Microsoft SQL Server or Oracle databases

Secured
- User single account and password
- LDAP connection
- Compressed data transfer and optional encryption
- Secured environment : HTTPS, DMZ compatible

International
- English and French native
- Other language on demand
- Unicode support
- Distributed files system with optional remote vault

Lascom assets

Short time and reduced cost implementation thanks to:
- Lascom's 20 years of experience and expertise
- Reactivity and efficiency of the Lascom service team, resulting from our 2 businesses: software vendor and IS integrator
- Lascom ICS strength from field experience
- Reliability of an established company
- Easy, large and international software deployment

An evolutive solution
- Graphical customization of the data model
- Powerful process designer
- Management of large data sets
- Flexible user rights management
- Easy integration with legacy Information Systems
- Specific developments using APIs and Web Services

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