

What is Xignum?

Xignum is a powerful and highly configurable tool to enable or support all your company processes and to manage all your company and project data in a single user interface. Use Xignum to define, retrieve, edit and interlink your data and processes with a single way of working. Trace the history of change. And achieve high levels of quality at low cost and low impact to your team.

Xignum is the only tool on the market that allows to easily and completely configure, to your needs, its functionality, user interface and interaction with third party tools and equipment. Its range of application is therefore broad. Xignum covers engineering (design, certification, etc.), production, inventory, maintenance, finance and project management, meeting essentially any process, data management or report production need you may have. Certification to ISO/EN/AS standards becomes straightforward.

Furthermore, Xignum serves as your central hub to access and link the various tools and databases you already may have in place. In this way you can have a “soft transition” from where you are now to a fully process-based way of working with a single point of data entry. End inconsistency and secure full traceability.

MANAGE ALL YOUR COMPANY AND PROJECT DATA IN A SINGLE USER INTERFACE

Highlights:

- One set of data, in one place, always up to date, with no double data entry
- Automated process of document creation using templates defined by the user
- Traceability of all data changes, decisions, lessons learned
- Implementation of internal and external standards, definitions and procedures
- View, interrelate and analyze data created in other applications (e.g. DOORS, Excel)
- Diagram views clearly visualizing complex system interdependencies
- Teamwork functionalities, flexible definitions of access levels to data

What is Xignum Aerospace?

To meet the high demands of product lifecycle management in the aerospace sector, Xignum developed and case-tested its Aerospace implementation.

Xignum Aerospace (XAS) supports process-based system engineering and configuration management throughout the product lifecycle. It helps with the management of product structure, requirements and verification, documentation, inventory, other configuration data and workflows during the phases of design, production, integration, verification, operations and maintenance. As any Xignum application, the tool can be tailored to your needs. It has however been pre-configured and case-tested to enable also small and

XAS SUPPORTS PROCESS-BASED SYSTEM ENGINEERING AND CONFIGURATION MANAGEMENT THROUGHOUT THE PRODUCT LIFECYCLE

medium-sized enterprises to meet the strictest design standards and internal company procedures (incl. ISO/EN/AS 9100, ED-79/ARP-4754, ECSS, MAN-GPQ).

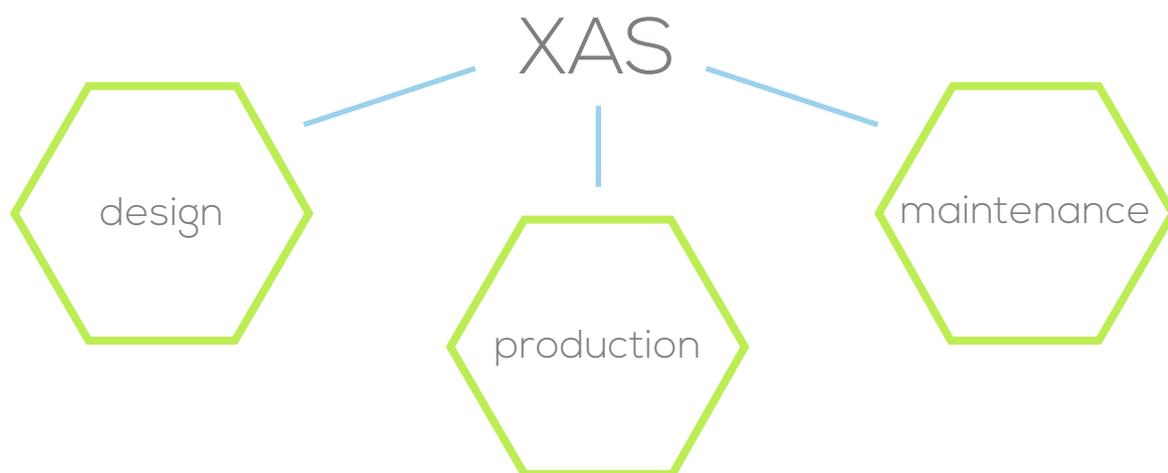
What do we mean by "System"

XAS enables to model data as one comprehensive „system“ that contains detailed product structure, its behavior and environment (i.e. all configuration items that refer to it and its parts). Due to the complexity of products designed and built in the aerospace industry this is the most effective way to create a traceable design, and to identify interdependencies and inconsistencies with their impact on the whole system.

Main idea of Xignum Aerospace

SUPPORTING THE WHOLE LIFECYCLE

XAS is intended to aid during the whole process of designing products as well as production and maintenance of the physical items. There are customized screens for the main lifecycle phases - tailored for the type of work done during each of them.



FEATURES:

- Requirements lists and diagrams with traceability and change management support;
- Product tree structure with connections (cables, pin-outs) and mass budget;
- Safety analysis with FTA diagrams, calculations and reports generation (FHA, FMEA, FMES etc.);
- Customized decision-making workflows, managing impact of design changes;
- Document management with versioning and centralized document storage;
- Document generation from live data, based on user-created templates;
- Inventory management features including maintenance activities with notifications;
- Managing production process (allocation of inventory parts, integration activities);
- Test and test-results management with requirement verification.

Main idea of Xignum Aerospace

SUPPORTING ALL DATA

XAS provides a place to add, see, search, filter and keep track of changes of all data types used during the project, as well as the relations between them - including data and relations from third party applications (imported or mapped in real-time).

All data (native XAS and from external apps) can be viewed in the environment of the configuration items they are related to (e.g. requirement in its flow-down process or

failure mode and its associated parts and functions). This way it is possible to examine effects of problems or changes. The progress of the design or production process can thus be conveniently monitored.

In XAS all data need to be entered only once and are easily kept up to date. Documentation can be created at any time (via customizable document templates). All changes are traced.

FEATURES:

- Lists, diagram views, property forms and filters defined for different kinds of data, such as requirements, documents, decisions/ trade-offs, CR, NCR, RFW/RFD, RID, product tree parts, functions, failures, tasks, inventory items etc.;
- Creating and maintaining product generations, variants, versions, options, both design and as-built (sold products) are fully supported;
- Views on data entered in other applications, ability to relate them to those created in XAS and to create aggregations, analyses and reports not available in those applications;
- Full history of changes;
- Creating baselines (snapshot of data at certain point of time), time-slider functionality.

Main idea of Xignum Aerospace

SUPPORTING THE WHOLE TEAM

XAS' functionality allows many users with different access levels to work in real-time on a single set of data. Providing a controlled place for team data (incl. opinions, ideas and problems raised), it avoids the fallacies of sharing data via emails or ftp. The risk of losing data and decisions is minimized. XAS guarantees work on synchronized data. It supports the use of common approved vocabulary, definitions and acronyms. The user interface can be tailored to access level as well as experience of any particular user (i.e. a complex analytical view on PC for a system engineer vs. an intuitive simple interface on an iPad for a field worker).

The risk of doubling conceptual work is mitigated as decision-making processes and conclusions reached / lessons learned are recorded. This approach has been proven to enhance by an order of magnitude the convergence of design in a creative environment.

**MANY USERS WITH
DIFFERENT ACCESS
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FEATURES:

- Lists of shared definitions and acronyms;
- Decision-making functionalities and diagrams;
- Procedures (workflows) can be defined for each type of configuration item;
- Access levels, user-customized views;
- Add and view messages, opinions, problems, ideas.

Main idea of Xignum Aerospace

SUPPORTING ALL PROCESSES

The flexible data model used by XAS makes it easy to implement external and internal standards and work procedures. Accessible workflows guide the user step-by-step through his work. This includes filling all standard-specific properties, which are then used to auto-generate documents. Dashboard views help to trace a standard's fulfillment (list of broken rules etc.).

THE FLEXIBLE DATA MODEL MAKES IT EASY TO IMPLEMENT EXTERNAL AND INTERNAL STANDARDS AND WORK PROCEDURES

FEATURES:

- Metadata editor with access to workflows, rules, templates, properties, property values.

Flexible data model

The proprietary data model used by XAS enables us to quickly and precisely customize the description of data used in your company and projects, including any data interface to other applications. There is virtually no need to do coding. We tailor for you the data types and subtypes of entities as well as their properties and relational logic. The user (with proper access level) has meta-data access to configure his company's own workflows, rules and data-access permissions for each entity category. XAS has a configurable versioning mechanism, which allows to implement complex change management scenarios.

How do we work with you?

We provide you with a specification of the Xignum Aerospace for you to review and edit freely. Within weeks from receiving your updated specification we provide a mock-up of the application, where we can discuss further and provide a quotation. Within typically two months from order we can deliver you your custom tool. This delivery may be only the beginning of our further cooperative work as you may well discover new features or functionalities to draw into your Xignum environment, which we will be able to perform near-real time. Note that your Xignum delivery will include many properties that you can freely configure by yourself as your project(s) develop. Finally, in Xignum itself there is a place to enter suggestions, needs and report problems to us.

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When you obtain a Xignum license and customization for your department, it includes 2 years of service to smoothen out any issues. Of course you can always opt to extend the service and/or the tool functionality.

You will quickly recover your investment as you converge your design much more effectively, and increase your team's efficiency with the help of Xignum's guaranteed traceability and consistency. We pride ourselves on the fact that our flexible data model makes it uniquely possible to do complex and far-reaching customizations at a cost level accessible for small and medium sized enterprises.

Challenge us!

We welcome your business enquiries or any questions you might have about Xignum & Xignum Aerospace. Please contact:

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