



AixBOMS IX Interfaces



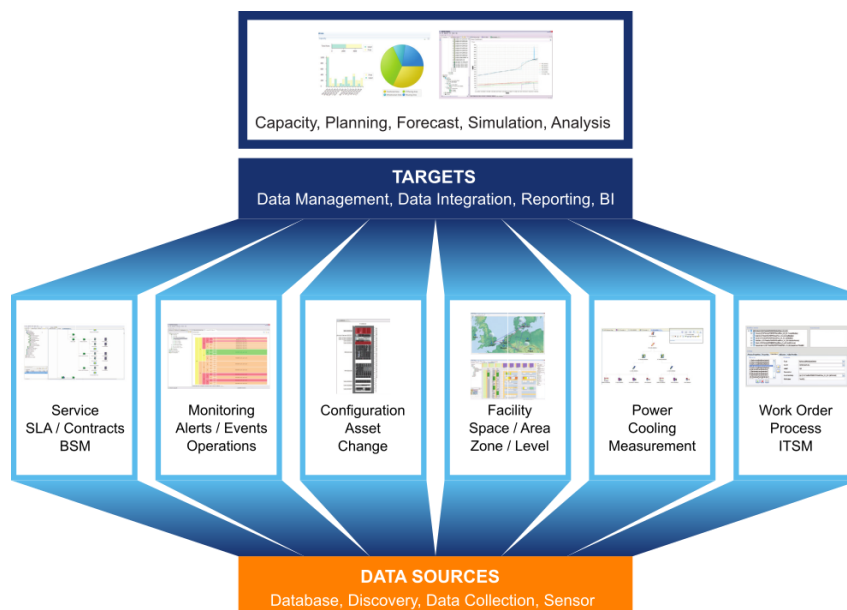
Holistic IT Management



**Integration is everything:
manage all of your components and
services with AixBOMS!**

IT infrastructure has become increasingly difficult to manage over the years due to an ever-growing number of components and services that must be accounted for. The advent of centralized management has added even more complexity to running a secure data center and network environment because of required specialized components, such as temperature and humidity sensors and smart power outlets. Management and documentation of these components often necessitates dedicated systems that are only able to interface with proprietary tools provided by their respective manufacturers.

A holistic IT management approach may not be expected to replace such systems entirely but, at the very least, demands that data center and component status information is readily available for comprehensive problem management, project planning, and analyses aiming to optimize overall operations. Take, for example, a server failure due to excessive heat gains. How does one quickly identify the root cause and act accordingly? Furthermore, integration with efficient IMAC/D processes supporting bulk operations and automatic work order management becomes particularly useful when taking into account the vast number of similar components requiring planning, configuration, documentation and ongoing management throughout their lifecycle from order placement to initial commissioning and beyond.



AixBOMS.ETL



From *ad hoc* to total integrator

The functionality, detail information, graphical views and analyses supplied by AixBOMS may need to be integrated with a user's digital workspace or an enterprise's software solution portfolio in many different ways (or vice versa). For example, service desk staff may want to quickly access in-depth technical information about IT components stored in AixBOMS directly from their browser-based help desk software in order to work through a ticket; perhaps, a company might want to actively propagate data available in AixBOMS to another enterprise tool – consider IP address information to be rolled out via a DDI tool; or, host status information available through an NMS tool is to be visualized in the AixBOMS Business Service Management module; etc.

The AixBOMS solution can be used as a CMDB (Configuration Management Database).

As such – and in accordance with ITIL best practices – it acts as a central data repository for significant components and their relationships in IT environments. It often also interacts with a variety of enterprise-level solutions in disciplines such as asset, problem, or service management.

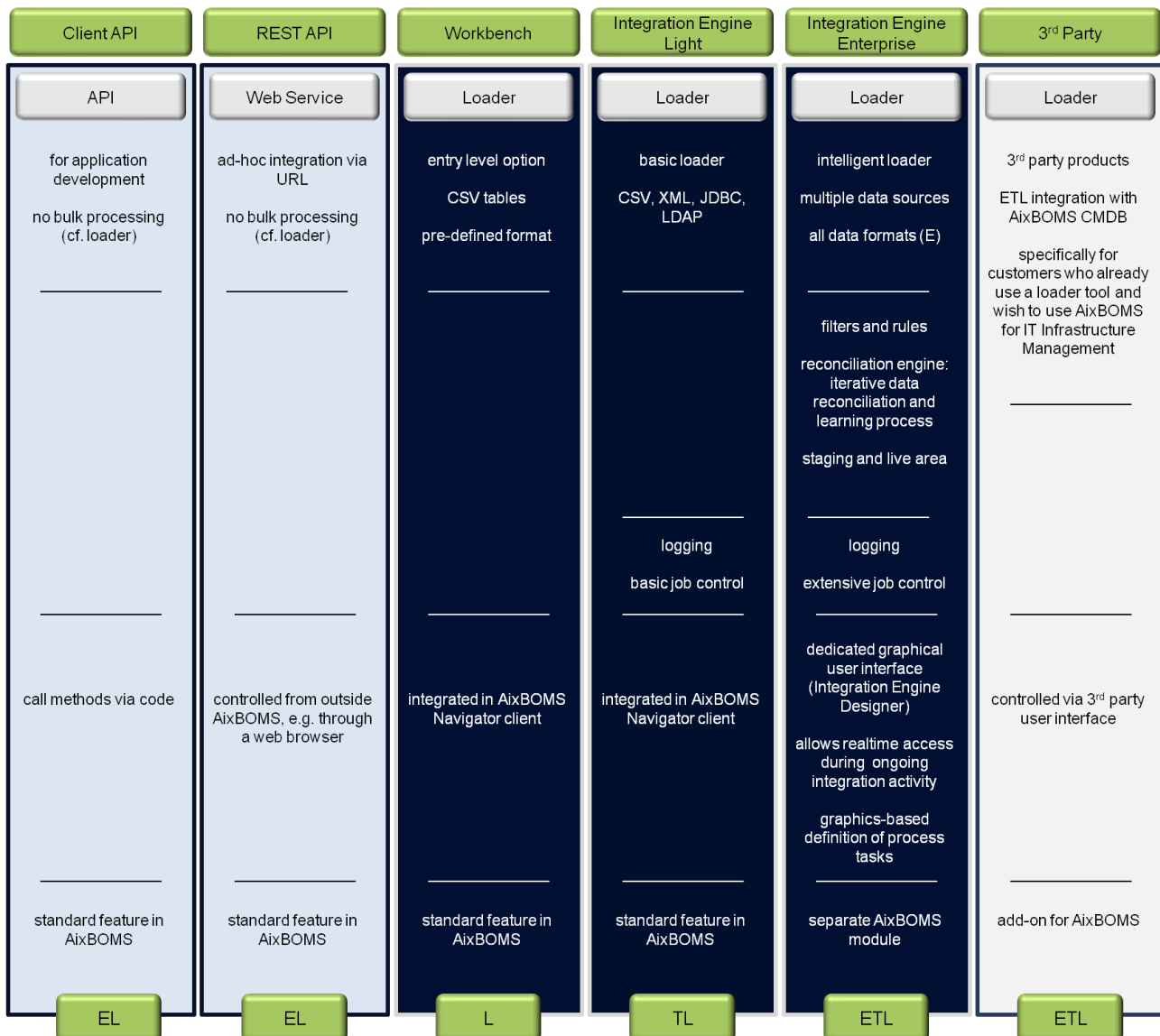
Any data repository with multiple sources inevitably needs to contain an “integration level” in its data model. The role of the integration level is significant in that it acts as a translator and regular updater for data in the CMDB. One common challenge, for example, is the identification and correlation of information supplied by multiple sources. Detailed technical and non-technical data for a server in a data center will be available from sources such as a purchasing system, an asset management solution, a discovery tool, a DDI software, a business service console, and quite likely from spreadsheets containing “specialist” information – and all presented via one interface or another. Key component attributes such as IDs, manufacturer, user and administrator relations, network addresses and host names, child components, location data, etc. are typically available from more than one of the systems mentioned above and will inevitably appear in different forms. Reviewing the information available, determining the “correct” version, moving it to the data repository and possibly propagating a “normalized” version to other enterprise applications is not a trivial task and may well necessitate an integration concept. And that's just the tip of the iceberg...

AixBOMS.ETL

AixBOMS is an Advanced CMDB, in that it not only meets ITIL requirements, but by far exceeds the functionality of a “passive” documentation system, as:

- It can interface with and “feed” third-party systems.
- It delivers CMDB-based technical modules for different use case scenarios in IT service and infrastructure management and in data center infrastructure management (DCIM).
- It features, last but not least, in addition to its wealth of integration options, a dedicated intelligent data integrator which efficiently manages and stores data from almost any data source in the AixBOMS CMDB, allowing for a truly holistic management approach.

The following graphic summarizes AixBOMS’ various integration options and capabilities:



Integration Options

AixBOMS Client API

The AixBOMS Client API contains many of the methods used in AixBOMS modules licensed by the customer. These represent functions used by the AixBOMS software when activities are triggered, for example, via menus, wizards, or editors in the AixBOMS Navigator. Using these methods with in-house developed software enables fast GUI-oriented results. The Client API can also access and edit database content allowing database information to be used in the GUI. Unlike our loader alternatives, this interface is not recommended for bulk data operations (as it lacks specifically developed filters, plausibility checks, or job control).

The Client API is especially useful for those who develop their own software for data exchange between AixBOMS modules.

AixBOMS REST API

As with the Client API, the AixBOMS REST API (REST: Representational State Transfer) also uses methods available from licensed AixBOMS modules. These can be packaged in a URL call (Web Services) and, comparative to the functionality available in Client API and AixBOMS modules, can access the database in order to interact with or modify data according to their specific purpose. The Client and REST APIs are not intended for use in bulk data processing (see AixBOMS Loaders), rather as valuable tools for *ad hoc* access to AixBOMS' central management tools, e.g.: Cable, Connectivity, Business Service, Configuration, Networking, Data Center, Problem, and so on.

This type of access is especially useful for web-based services (e.g. help desk and trouble ticketing software) that call up required database information from within a web browser and incorporate the data into their proprietary systems. In this use case the REST API drastically simplifies error diagnosis thanks to its ability to provide further detailed information about individual callers, their workstation(s), their network connection(s), underlying maintenance contracts, etc.

AixBOMS Loaders

AixBOMS Loader tools include specially developed filters, plausibility checks, and job management controls ideal for bulk data processing. We have developed three loader variations with different degrees of functionality and performance to meet the specialized requirements of our customers.

The **AixBOMS Workbench** and **AixBOMS Integration Engine Light** are standard components of the AixBOMS Navigator and provide easy-to-use methods for loading data into the database.

The Workbench can import data from Excel spreadsheets that are formatted for AixBOMS. During load operations, imported data is uniquely mapped to corresponding database entries.

Integration Options

The Integration Engine Light can process data from various sources and currently supports CSV, XML, JDBC, and LDAP formats. Imported data is assigned to AixBOMS database content by means of data mapping, with additional options such as scheduling an operation's start time. Protocol files are created during load operations. For example, when data sets fail to load successfully, a delta file is created and can be used to correct the data and reuse it in a subsequent load operation.

The **AixBOMS Integration Engine Enterprise** is our intelligent loader that can read almost all input sources and includes specific features for consistent, efficient, and recurrent data integration. Users can select which data they would like to load (*extract*) within a dedicated user interface and apply filters and rules for data transformation when mapping the imported data to database content (*transform*). Load operations are handled in two steps in the so-called "Staging Area" and "Life Area". Corrections and verification checks may also be applied to data between the extraction and transformation stages. The Integration Engine Enterprise's job management tools offer bulk data processing oriented features, such as pipeline parallelism for load operations (*load*). Please see our white paper [ETL, Staging und Reconciliation im CMDB-Kontext](#) for further information about the Integration Engine Enterprise.

AixBOMS 3rd-Party

AixBOMS Add-Ons are available to customers who require third-party software support, enabling the use of third-party loaders for administering load operations into the AixBOMS database. However, the features available in our Integration Engine Enterprise are not included.



AixpertSoft GmbH is a privately owned software company based in Aachen (*Aix-la-Chapelle*), Germany.



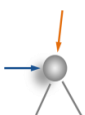
AixpertSoft's primary focus is the development and distribution of software solutions for Data Center Infrastructure Management (**DCIM**) and IP Address Management (**IPAM**) based on advanced CMDB technology. Together with our parent company ComConsult Kommunikationstechnik GmbH, we have more than 25 years of experience in project planning and development, thus providing a solid foundation for integrating future-oriented methods and the most cutting-edge platform technologies in the further development of AixBOMS. For these reasons and many more, numerous Top500 companies have chosen AixBOMS for their data management needs.



The AixBOMS product line is known as an Advanced CMDB due to its outstanding properties and early adoption of progressive technologies, such as IPv6, hardware and software virtualization, cloud computing, and SaaS. After celebrating AixBOMS' 10th birthday in 2012, AixBOMS was named the winner of the **Innovationspreis-IT 2013 (Initiative Mittelstand)** in the **IT- Service** category. Shortly thereafter, AixBOMS was also awarded the **eco Internet Award 2013** as „Best Solution“ in the **Housing/Hosting/Data Center** category by the eco e.V. (Association of the German Internet Industry). AixBOMS has also been selected as one of the **Top15 DCIM Tools** by **DataCenter-Insider**. Both in 2015 and 2016 AixBOMS received the prestigious Silver IT-Award presented by DataCenter-Insider, based on their readers' choice! Today, AixBOMS is used by about 15.000 users.



The Aixpert Advantage: Excellence in Documentation



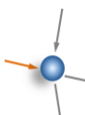
Cost-effective object-oriented documentation

Fast, cost-effective, and extremely accurate template-based data processing delivers a basis for plausibility checks



Graphical representation of data elements turns the CMDB into a central information hub

AixBOMS CMDB renders complex data structures and dependencies from other sectors (technical components, services, master data, contracts, SLAs, non-IT) into clear graphic images, while retaining data integrity and high levels of data quality



Immediate, noticeable effects on project planning

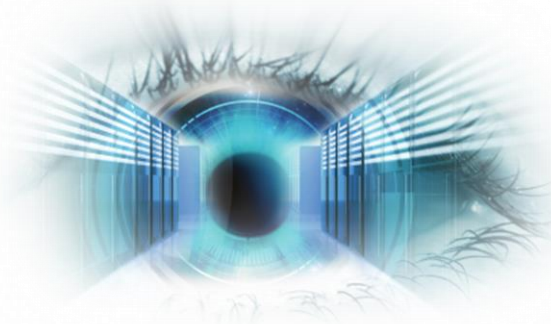
AixBOMS "Staging Area Concept" uses "actual" and "target" conditions for project planning based on a plausible and extensive amount of data

10 Jahre AixBOMS

Excellence in Documentation



AixBOMS is an Advanced Configuration Management Database for IT Service and Data Center Infrastructure Management. AixBOMS offers a clear competitive advantage through its ease of use, support of up-to-date technologies, and high flexibility and configurability for meeting distinct customer requirements.



Integrating AixBOMS into current system infrastructures is made simple thanks to its open interface model. Its core tasks are based around the standardized documentation and management of all necessary information for the planning, operation, and accounting of networks and IT inventory.

AixBOMS consists of a suite of applications based on Advanced CMDB technology that are unrivaled in their capability and expandability. Its vast range of uses includes rendering sophisticated graphical views of database information and extends to managing and monitoring complex IT Services, with object mapping capacity down to the port, connection, network, address, and virtualization level.



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