

CADAS-AIM_{DB}

COMSOFT'S AERONAUTICAL DATA ACCESS SYSTEM – AERONAUTICAL INFORMATION MANAGEMENT DATABASE

HIGHLIGHTS

- Complete AIMX 5 data model
- Aeronautical Data and Information Quality (ADQ) compliant
- EUROCONTROL compliant Static Data Procedures
- Data fusion of static and dynamic data
- WFS-T 2.0 Interface
- AIMX 5 GIS Front End
- EAD System Interface (ESI) for Data User and Data Provider

COMSOFT

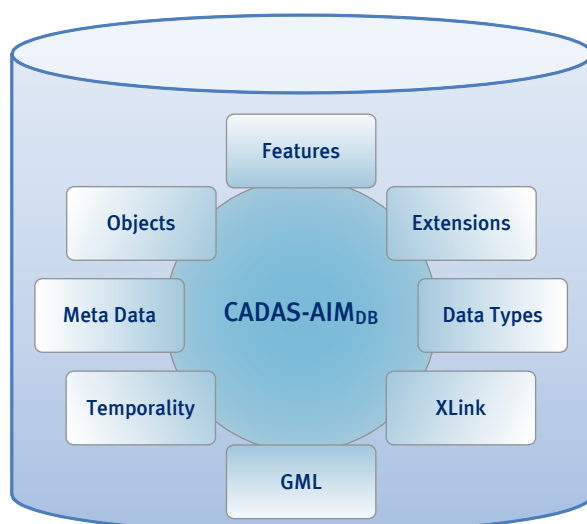
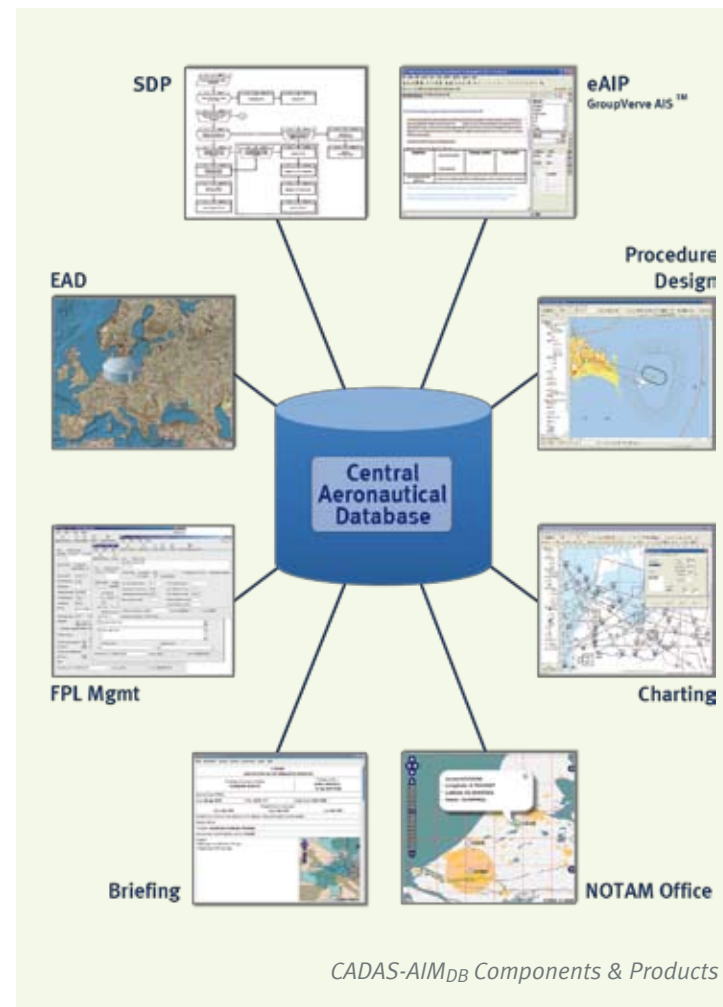
INTRODUCTION

CADAS-AIM_{DB} (COMSOFT's Aeronautical Information Management Database) is a fully featured AIXM 5 database that implements the temporality model as defined in version 5 of AIXM.

It is designed to serve as a base for integrating AIM applications and components such as electronic AIP, Charting, Procedure Design, NOTAM Office or Briefing. Converting from AIXM 4.5 to AIXM 5 enables data exchange with any third party tool which is capable of reading and writing AIXM.

AIXM 5 comprises a superset for the existing static and dynamic data formats. While AIXM 4.5 was still a rather simple relational database model for static data only, AIXM 5 has been extended by models covering the temporal aspect of dynamic data such as NOTAMS.

Based on SOA principles CADAS-AIM_{DB} allows creation of a net-centric AIM system. Open interfaces are fully in-line with contemporary System Wide Information Management (SWIM) concepts and assure compatibility to SESAR (Single European Sky ATM Research) and NextGen (Next Generation) system architectures. The platform and language independent SOAP interface handles native AIXM 5 data.



Database Content

Standard version of CADAS-AIM_{DB} provides

- All features and objects defined by AIXM 5
- ADQ Compliance (EC 73/2010)
- Data Originator Integration
- Full support of AIXM 5 application schemas to store additional custom specific information like e-AMI and e-ASM
- Processing of static and dynamic data (including digital NOTAM)
- Standard WFS 2.0 for access to the aeronautical information for all clients
- ESI for automated uploads of AIXM data and eAIS packages



A clear graphical presentation and textual presentation of AIMX 5 data supports the operator by his day-to-day business. The AIMX 5 viewer directly connects to the AIMX 5 database CADAS-AIMDB and displays the contained data on the globe in 4D, which is 3 spatial and one temporal dimension. This includes e.g. restricted areas, FIRs, routes, aerodromes and any other aeronautical information that can be expressed in AIMX 5. In addition to AIMX 5, the viewer supports further data formats like JGP, PNG, SHP, DEM, etc., and a number of cartographic projections like UTM, Lambert, etc. Of course, rhumb lines and great circles are also part of the rich feature set. The AIMX 5 viewer is constantly being enhanced and new features are added regularly.

Figure “3D-Graphical presentation of Estonian restricted airspace and obstacles” shows the 3D-visualisation of Estonian AIMX 5 data (which was converted by COMSOFT from AIMX 4.5 to AIMX 5.1 within a project).

Figure “Visualisation of Airport Data 3D (AIMX 5.1)” also shows a timeline at the bottom for selecting the effective date for which the data shall be displayed. Also digital NOTAM can be displayed easily, since digital NOTAM are also represented as AIMX 5 time slices.



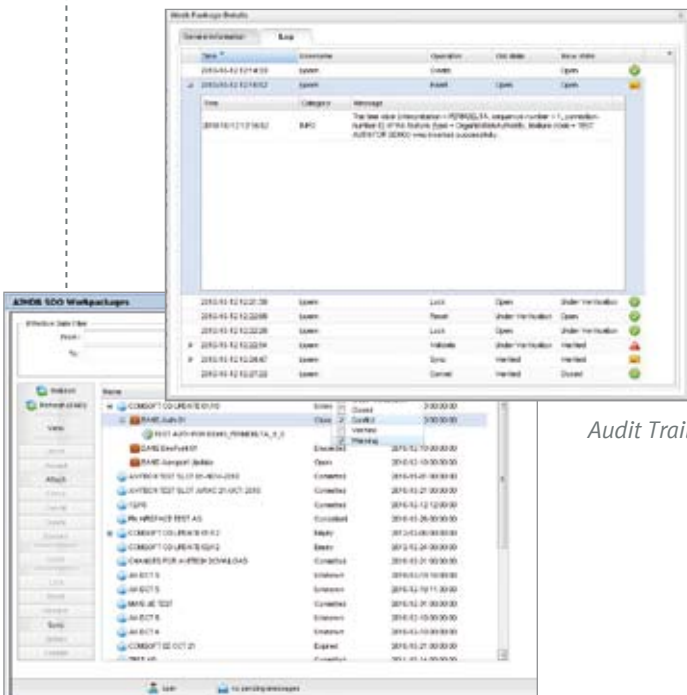
3D-Graphical presentation of Estonian restricted airspace and obstacles



Visualisation of Airport Data 3D (AIMX 5.1)

Highly efficient workflows between data originators and AIS application managers are guaranteed by EC 73/2010 compliant web-based electronic Input Forms (eIF). This user-friendly and intuitive software application enables an AIS officer to collect data from data originators. eIF is a key element of any AIM implementation, as it allows to improve data integrity and quality by avoiding data re-entry at the AIS office.

COMSOFT’s design concept facilitates a modular migration scenario for AIS data and services that enables organisations to approach AIM at a very low risk and in a smooth manner. Total cost of ownership can be fully assessed in advance. The comprehensive AIMX 5 implementation means experiencing the advantages of AIMX 5 from the beginning.



Audit Trail

SDP and Work Packages



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