

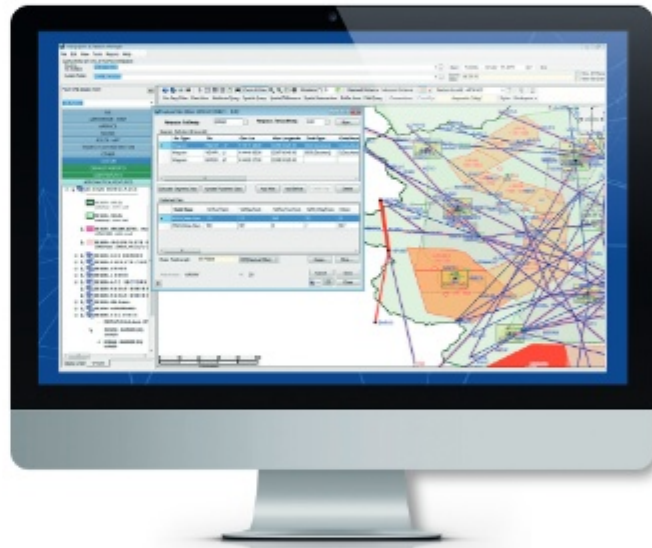
Data Maintenance

» Data Maintenance is part of IDS's integrated suite of applications for aeronautical information services and management (AIS/AIM). The suite consists of a central aeronautical database and a set of tools for the production of AIS products and the management of static and dynamic data. The integrated nature of IDS's AIS/AIM solutions ensures full compliancy with the ICAO mandate for data quality. Data Maintenance lies at the heart of IDS's integrated AIM suite. It supports the transition from Aeronautical Information Services (AIS) to

AIM, providing structured static and dynamic data management while maintaining the concept of temporality.

Data Maintenance can provide support to:

- Civil Aviation Agencies
- Air Force Agencies
- Air Navigation Service Providers
- Airlines
- Airports
- Aeronautical cartographic and mapping companies



Features:

The main Data Maintenance features are:

- Central Aeronautical Database
- Compatibility with Eurocontrol's AICM/AIXM
- Temporal Data Management: efficient management and monitoring of time related information
- Graphical interactive management of aeronautical features
- Accessed by multiple client applications
- Configuration data and rules storage, which drive the customizable applications environment
- Rule checking instruments to avoid errors

Data Maintenance

- Quick access to the most up to date information for all users
- Decreases the chance of errors in transmission or exchange of aeronautical data
- Data integrity verified by making use of Cyclical Redundancy Checks (CRC) to ensure the standards required by ICAO
- Report generation to show which aeronautical products are changed by changing a particular piece of data
- Possibility to customize Data Maintenance's records/tables schema

Data Maintenance Modules:

Included within the core of Data Maintenance is a set of tools which allows the insertion and maintenance (extracting, updating, deleting) of aeronautical features data and their associated attributes. These tools can be augmented by additional powerful modules:

- **Aerocatalog** – a document repository which stores and catalogues documents, charts and templates
- **SpecMan** – database structuring and maintenance tools which allow the customization of Data Maintenance's records/tables schema to meet the unique requirements of a user's aeronautical features data format and layout.
- **GFeaMan** – Geographic Feature Manager provides aeronautical data management and presentation in a GIS environment
- **RepMan** – Report Manager provides functionalities for the development and presentation of Data Maintenance data reports and statistics
- **RuleMan** – Rule Manager allows the rule sets stored in Data Maintenance for the automatic extraction and visualization of aeronautical charts to be defined and modified
- **Dynamic AIS** – a management system for all types of NOTAM, OpMet and Flight Plan messages

Benefits

Data Maintenance is compatible with Eurocontrol's AICM/AIXM, ARINC and ICAO standards by default and allows AIS organizations to maintain a single central data repository for both static and dynamic aeronautical information. As a result, aeronautical data only needs to be analyzed, validated and entered into the database once before it becomes

available to all aeronautical database users.

Data Maintenance provide an interactive environment that automatically propagates to output products the changes applied to aeronautical information. Data quality is verified making use of Cyclical Redundancy Checks (CRC) to ensure standards required by ICAO.

By its nature, aeronautical information is time dependent. Temporal functionality is an integral part of Data Maintenance and provides for the efficient management and monitoring of time related information. Future or temporary changes can be made to the database ahead of time but will not become effective until the live date for the data, allowing data for large aeronautical products to be input well in advance of their issue dates.

Temporal processing is also responsible for tracking and reporting changes to information, ensuring a greater level of data integrity and security. It can generate reports to show which aeronautical products are changed by changing a particular piece of data and whether or not that update has taken place. By storing information temporally, previous data states can easily be recovered if need be. This feature is useful, for instance, following temporary changes in circumstances or procedures.

