Digital Data Distribution

» Database Interaction and Data Translation

A suite of tools which provides an interface to the European AIS Database (EAD) and allows the distribution of digital data
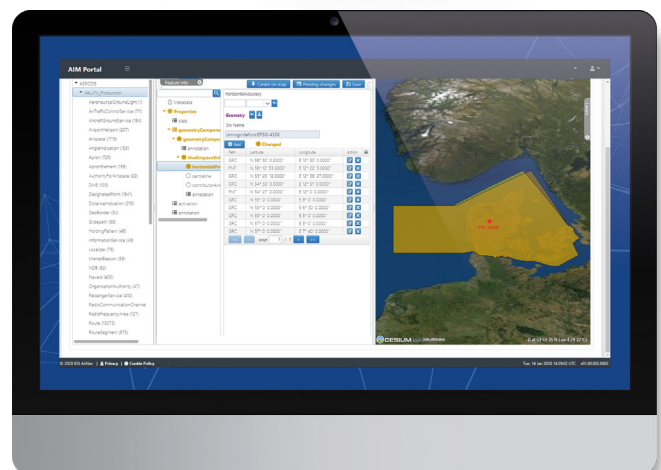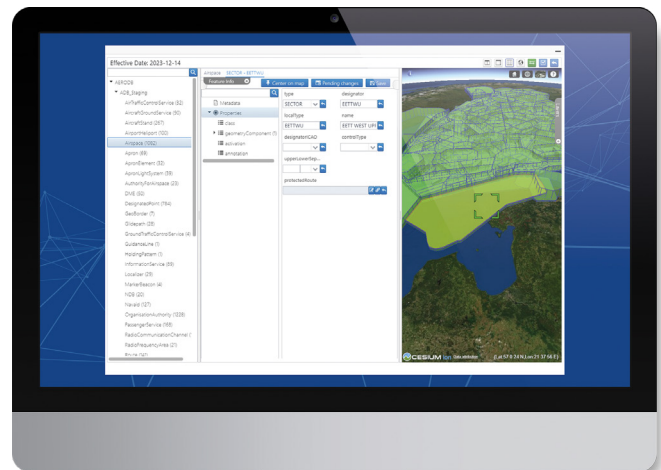
Digital Data Distribution:

Digital Data Distribution is part of IDS AirNav 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 to produce 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.

Digital Data Distribution tools provide Aeronautical Information Service (AIS) providers with fast and safe methods of distributing traditional AIS Products and electronic aeronautical data sets from multiple data sources including the aeronautical database, AeroDB.

Digital Data Distribution includes "Data Distribution Portal" (DDP), a web application that to allows data consumers (internal or external to the AIM organization) to easily access to information updates by searching\browsing them on the HMI and by producing on demand reports maps.

A B2B version of the data distribution interface is provided by the "Data Distribution Services" (DDS) that allow to feed external systems in digital formats by means of standard and SWIM compliant interfaces. Being highly flexible DDS allows to configure custom interfaces to connect legacy systems.

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"AeroEAD" is also part of the Digital Data Distribution and is developed to provide an interface with Eurocontrol's European AIS Database (EAD) which is compliant with the EAD Aeronautical Information Exchange Model (AIXM) data and data exchange model (4.5 and.5.1). AeroEAD supports both ESI and AIMS EAD interfaces.

Features and Characteristics:

The main features of Data Distribution Portal are as follows:

- **Web Data Browser:** to navigate Static & Dynamic Aeronautical Information effective within a validity period set by the user
- **eCHART:** to visualize aeronautical information on a configurable Map View. The map View can be connected to multiple data sources exposing standard GIS interfaces
- **Query Interface:** to select information to be displayed on the Data Browser and\or on the eChart;
- **Changes Highlight** to highlight changes in Aeronautical Information between different effective dates.
- **On-Demand Reporting** over aeronautical data and export in multiple format including:
   o Aeronautical Information Exchange formats (AIXM)
   o Geographical Information formats (KLM, SHP, etc.)
- **Document Library:** providing access to electronic version of the Aeronautical Publications (AIP, SUP, AIC, eAIP, Charts)

The main features of Data Distribution Services are as follows:

- **AIXM Service:** to distribute aeronautical information in AIXM 5.1 format. The source of such information can be the IDS AeroDB or an AIXM 5.1 data set
- **OGC Services.** to distribute information in standard OGC formats (WFS, WMS). The source of such information can be a general GIS data source

- **Custom Services** to be configured case by case to integrate eventual external systems
- **Administration Capabilities:** to allow an authorized user to configure the application in terms of:
   o Definition of Data Sources and related connection parameters
   o Definition of User Rights in terms of access rights to the DDS services and data

The main features of AeroEAD are as follows:

- **SDO Module Integration:** to provide AIXM 4.5 data updates to EAD
- **SDD Module Integration:** to provide AIXM 5.1 data updates to EAD and to retrieve data via EAD B2B services
- **PAMS Module Integration:** to access the EAD document library and to provide AIP and eAIP updates to EAD

Benefits:

- Automated distribution to data consumers via a web portal
- Automated distribution to external systems via standard and swim compliant web services (WFS, WMS)
- Support of standard (AIXM 5.1) and custom formats
- Full integration with other components of the IDS AirNav suite for:
   o Workflow Management (PLX)
   o Traceability (Auditing)
   o Aeronautical Data Retrieval (AeroDB)