GO Loader Aviation enables Airservices Australia to validate aeronautical information for flight planning

Background

Airservices is an Australian government owned organisation providing safe, secure, efficient and environmentally responsible services to the aviation industry. The organisation provides the industry with aeronautical data, telecommunications, navigation services and aviation rescue fire fighting services. In managing air traffic operations for over 90 million passengers on more than four million flights each year the organisation has a requirement to provide a flight planning service and ensure the aeronautical information used is valid.

Challenge

"We needed to be able to validate airspace, location, waypoint and route information in a filed flight plan as well as perform geospatial calculations to determine the airspaces a flight would pass through." explains Paul Chisholm at Airservices Australia.
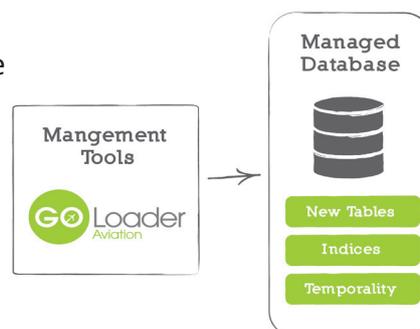
"Our source data is in AIXM 5.1 and we required a way to create and load the AIXM extract into a database in order to do the required data analysis. We needed a tool capable of handling the new AIM data formats."

Solution

Built on Snowflake's proven and established GO Loader platform, GO Loader Aviation provides aviation organisations the ability and flexibility to load and manage the next generation of AIM data standards – without re-engineering of existing systems or custom development. Airservices Australia implemented Snowflake Software's GO Loader Aviation AIM data loading software to enable them to quickly and easily load their AIXM 5.1 data.

Rapid system setup

GO Loader Aviation is used to create a full temporality based AIXM 5.1 database with all tables, indexes and spatial types established to support the full AIXM 5.1 model. This process is used for both the non-production and production environments.

Customer
Airservices Australia

Location
Australia

Industry
Air Navigation Service Provider (ANSP)

Challenge
Airservices Australia needed to validate airspace, location, waypoint and route information in a filed flight plan to determine the airspaces a flight would pass through.

Solution
GO Loader Aviation

Benefits
"We've been able to vastly reduce the effort required to create the database, as well as the effort required to load the data into the database. As a result our team is able to provide quality analysis of AIXM data, quickly." explains Paul Chisholm.
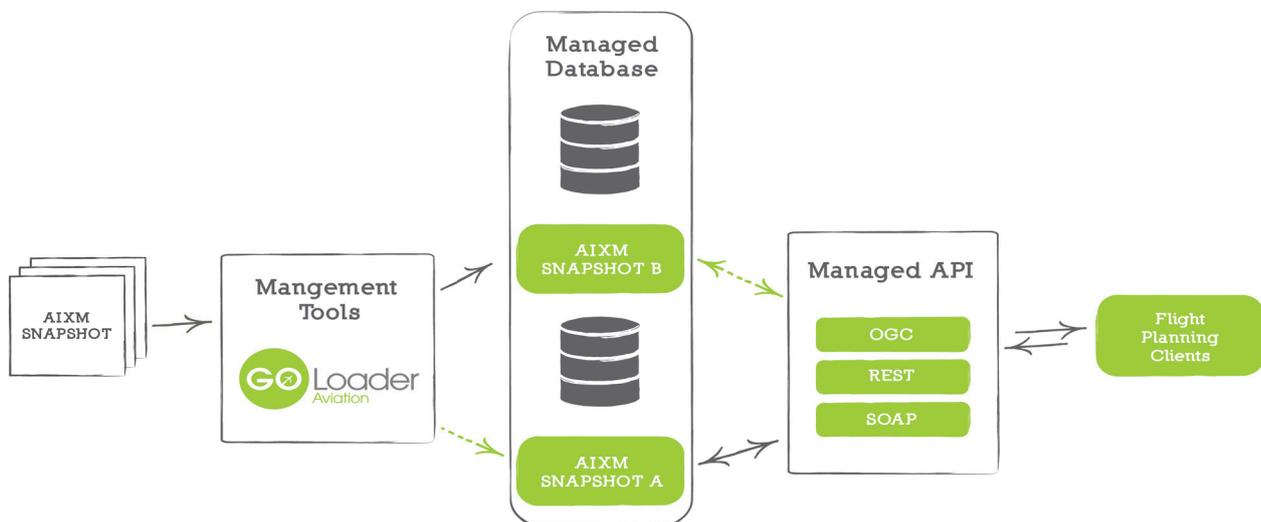
With GO Loader Aviation sitting in the background, automatically loading data as part of a robust Information Management process, Airservices Australia have been able to save months of internal development effort vs manual editing and loading of their AIXM data.

"We worked closely with the Airservices team and were able to demonstrate the product value almost immediately. The AIXM 5.1 templates in GO Loader Aviation enabled Airservices to set up a fully fledged database in minutes and save a serious amount of effort taking the system to production." – Alexis James Brooker, Professional Services Director, Snowflake Software.

Business as usual
GO Loader Aviation is used to periodically load a full AIXM 5.1 snapshot into the non-production database. After data load, all indexes are updated for all keys and spatial types and QA checks are completed. Once the new snapshot is effective, the Managed API switches the source database to be the correct effective source, moving its status from non-production to production, with no client downtime. GO Loader Aviation can now be used to clear out the non-effective non-production database, and a new snapshot loaded when available.

"For us, the availability of a pre-configured AIXM template in GO Loader Aviation has allowed us to create an AIXM compatible database schema with very little effort. GO Loader also automates the loading of the AIXM extract into the database."

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About Snowflake Software
Founded in 2001, Snowflake Software is an award-winning provider of on-premise and cloud-based software solutions, consultancy and training for loading, managing and sharing aeronautical, weather and flight data. Active in the aviation market since 2008, Snowflake has built its reputation as an expert in data exchange receiving a number of prestigious industry awards for its work, including 2-time SESAR Master Class winner, recipient of the 2013 Geospatial Technology Company of the Year, and winner of the 2015 IHS Jane's ATC Award.