

The Australian Department of Defence is using Mediaflux to seamlessly access every possible source of information to support better national security and Defence decisions.



## **Overview**

The Australian Department of Defence is a department of the Government of Australia responsible for defending Australia and its national interests. Along with the Australian Defence Force (ADF), it forms part of the Australian Defence Organization (ADO) and is accountable to the Commonwealth Parliament, on behalf of the Australian people, for the efficiency and effectiveness with which it carries out the Government's defence policy.

## The Challenge

The ready availability of satellite imagery covering various spatial, spectral, temporal and radiometric resolutions and photomaps has led to an enormous increase in the quantity of data to be acquired, processed, stored and accessed by agencies interested in analysing information about features on the ground, their relationships to the Earth and to each other. There is a need to:

- Streamline and improve the scalability of processes to ingest geospatial data.
- Provide flexible and immediate access to the catalogue of data holdings to answer questions such as "What data do we hold that relates to a particular locality?", "What type of data is this?", and near immediate access to the data itself.

## The Solution

Mediaflux has been adopted to solve these problems for the Department where it manages all geospatial data holdings, and allows the creation of advanced data management workflows with automated quality assurance, analytical processing and reporting for both in-house systems and systems in the field.

Using simple drag and drop, data can be ingested, analysed, packaged, quality assured and stored. Analysers automatically extract metadata for various data types, minimizing the manual entry of metadata. Data types include CIB, DTED, CADRG, ERDAS IMG, GeoPDF, GeoTIFF, NITF 2.0, NITF 2.1, MrSID and GeoJPG. Data can be routed via workflow processes that automatically detect anomalies and errors that can be rectified at the earliest opportunity, improving data quality.

Mediaflux enables the export of data into a variety of specified metadata profiles and provides the ability to create customized metadata export profiles.

## The Outcome

Previously, a few thousand discrete datasets were ingested each month. With Mediaflux, this has increased to over 40,000 new datasets per month. During the initial stages of setting up the new workflow processes, errors were detected and rectified in over 8,500 existing datasets.

Users are able to instantly search and discover all geospatial data holdings. Multiple search modes are available, including graphically specifying a geographical bounding box, entering in geographical coordinates, specifying a point and radius, or by using a geospatial feature data base containing over 7 million place names. Search results can be filtered based on any attribute of the metadata, including dates and data types.

The adoption of Mediaflux has improved coordination, with the approach of "enhance once, use many" enabling better use of fixed capital resources.