

Digimundo Releases New Module DMAgriGest

Digimundo Lda (Portugal) has released their new module DMAgriGest for its open platform DMAgri. DMAgri is designed to meet the needs of modern agriculture. It has been designed as a completely modular structure: the main module (DMAgri itself) serves as the integration framework for the other modules, which in turn provide specific solutions to the needs in each situation.

Because its architecture is based on plug-ins, the various modules can be freely combined, allowing for a wide range of configuration possibilities. It is an open technology, meaning that the clients and partners who have purchased this technology's license and who wish to develop their own components and modules can do so. Because this is done using the Microsoft .NET framework, a wide variety of languages and tools can be used for this purpose - including, among others, C# and VB.NET.

The DMAgri framework enables the access to a database with version tracking, containing georeferenced and alphanumeric information as well as raster images. All the retrieved information is therefore constantly recorded and it is possible to audit and access any previous version.

The client/server architecture allows several users to access and update the information simultaneously. This can also be done by way of a VPN via Internet. The WEB access module makes it possible to retrieve the information available (and to carry out certain limited updates) through an Internet browser.

The modules available for DMAgri include:

Data collection in TabletPC - using DMAgri in a TabletPC environment, with all the advantages of the pen interface;

Digitisation - digitising various types of features, using definitions specifically designed for each situation;

Georeferencing of external features - associating external features and files (for example, digital photographs), so that they can be integrated with the remaining information;

Online and deferred GPS interface - downloading and integrating GPS data or, alternatively, collecting GPS data from the field in real time;

Managing raster image files - managing different types of raster image files (digital orthophotomaps, satellite images, among others), sorted according to their original date or moment of acquisition;

History - retrieving and visualising information exactly as recorded at any previous time;

Alphanumeric reporting - creating, customising, visualising and printing reports containing alphanumeric information;

Graphic reporting - creating, customising, visualising and printing reports containing alphanumeric and graphic information;

Importing GIS data - importing and accessing raster and vector GIS data from various sources;

Exporting GIS data - exporting data and information introduced into DMAgri in standard formats (including XML, Microsoft Access, ESRI shapefiles);

Automatic photointerpretation of tree species - automated digitisation of various tree species using specific parameters;

Online and offline process - retrieving and accessing information using equipment not permanently connected to the server;

WEB consultation module - allowing remote users to access the available information (and carry out limited updates) using an Internet browser.

For special applications, DMAgri offers the following modules:

Agricultural cadastre - digitising and characterising agricultural parcels and equipment. Includes reports and specific analytical functions for this purpose;

Vineyard cadastre - identifying and characterising vineyard sub-parcels and varieties;

Farm management - collecting, managing and updating georeferenced information for farm management purposes. The structure of the information is open and flexible, allowing for the customisation of each farm;

Document management - managing documents associated with the information recorded in DMAgri. The use of the DMAgri database means that all of its functions (including georeferencing and version tracking) can be used on the stored documents as well;

Land cadastre digitisation - collecting, editing and validating cadastre survey records, both in the field and at the office.

DMAgri permits the access to a variety of data sources in heterogeneous formats, including ESRI shapefiles, PostGIS, MsSqlSpatial, ERMapper ECW and JPEG2000, and uses the Microsoft SQLServer 2005 database (including the Express version). The development of new data providers is possible subject to licensing.

<http://www.digimundo.net/>

(Source: Digimundo)

<https://www.gim-international.com/content/news/digimundo-releases-new-module-dmagrigest>
