



12d Interface, GIS and File I/O

12d Model works on the principle of taking data through the entire project life cycle.

12d Interface

12d Model works on the principle of taking data through the entire project life cycle. Information often begins its journey in a GIS database, is loaded into a 12d Model project for detail design or analysis then loaded back into the GIS database for asset management, records management or simply for an easy way to access that data in the future.

With this principle in mind, all of the modules that read or write data in GIS format maintain the wealth of attribute data that is important if that data is to be of any use in the future.

12d GIS

Getting information out of GIS systems can be arduous and difficult.

Typically a request would need to be made for the GIS data to the GIS system administrator. A user then has to be sure that they have requested all of the correct data.

Finally when data is received, users then hope that it has been given in a format that is readable for the program that they are using. If that data has had to go through a translator there is always the possibility that attribute data could get mixed up or left out.

12d GIS gives the user the means to download and upload information directly from and to a GIS database, taking away the complexity out of reading and writing to an exchange file.

MapInfo

MapInfo is a popular program in the GIS world and a large number of organisations have their data stored in MapInfo ".tab" files.

12d GIS can pre-load the tab files so the user can see the attributes attached to the data and have the option to map the names of the attributes to what is needed by their project.

Advantages include:

- save time by getting the data directly as you need it
- saves having to deal with different file formats
- avoids having to deal with proprietary formats

Increasingly GIS systems are becoming the repository of survey accurate data and as constructed data. It is this data that is ultimately useful to engineers, designers and surveyors.

12d Input/Output

The 12d team understand the importance of providing a solution that caters for a multi-disciplinary environment. Ideally, 12d Model should be used for all civil and surveying projects. Importing and exporting would only be required in areas where 12d Model has not been developed.

However, 12d Solutions, also understand that organisations often have invest in a number of different software packages. 12d Model does cater for efficient data transfers in such a dynamic environment.

Read/Write File Types

12d Model efficiently handles the following file types:

12da	xyz	DWG, DXF, DXB
DGN	Genio	Geocomp
Keys	LandXML	TOT
LAS	SRTM	



Increasingly GIS systems are becoming the repository of survey accurate data and as constructed data



Roads and Highways

12d Model's design option is the smarter solution for the design, modification and maintenance of Road and Highway projects.

Enjoy advanced 3D tools to design local and major roads, intersections, roundabouts, highways, interchanges and much more.



Ports and Dredging

12d Model is the solution for port infrastructure and dredging, easily managing the very large datasets and complex volume calculations often required by these projects.

A complete range of flexible and customisable volume calculation tools allow teams to extract and present the information quickly and easily.



Land Development

12d Model is the most versatile solution for the creation of sustainable land development projects, including residential, commercial and industrial developments, recreational areas, landfills, and agriculture projects.

Easily manage all aspects of your land development project from earthwork quantities, road design utilities and drainage design.



Airport Infrastructure

12d Model provides a solution for the design, construction and analysis of new airports, as well as the upgrade and maintenance of existing runways and airport infrastructure.

Easily manage large airport infrastructure projects and share data across multi-disciplinary teams.



Rail

12d Track has been specifically designed for the survey, design and construction of light, heavy and high speed rail projects.

Extensive railway tools in 12d Track allow the rail designer to quickly and easily design their projects. These options are built on the existing 3D modelling and design tools available in 12d Model.



Mining Infrastructure

12d Model's powerful set of exploration, site investigation, survey and analysis tools are crucial for the initial design, construction and ongoing operation of mining projects.

Comprehensive tools for the survey, design and construction of access roads, railways, earthworks and services allow for the coordinated design and management of mining infrastructure from within 12d Model.



Drainage, Sewer and Utilities

12d Model provides comprehensive tools for the design, analysis and optimisation of stormwater and sewer projects using rational, dynamic (hydrograph) and 2d drainage methods.

Powerful clash detection management allows for efficient 3D modelling of service networks such as gas, electricity, telecommunications and water prior to construction.



Surveying

12d Model is a complete surveying package providing the tools to manage all facets of surveyed data including LIDAR, topographical, as-built, conformance, traversing, geodetics, data mapping, labelling and much more.

The 12d Field option runs on a ruggedized tablet and gives the user access to full 12d Model functionality, allowing you to take the entire project into the field with the most comprehensive pick-up and set-out tools.



Oil and Gas

12d Model assists with the design, construction and mapping of oil and gas pipelines, original site exploration and the wide range of infrastructure required for oil and gas projects.

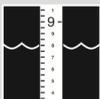
Accurate 3D modelling and the ability to share data between users allow teams to quickly and easily coordinate designs.



Construction

12d Model is the ultimate software for construction with powerful set-out options, direct interfaces to machine control and detailed conformance reporting and auditing.

Manage 3D data and control volumes, quantities and progress claims with 12d Model. Set-out your project and undertake conformance and as-built surveys live on-site using 12d Field.



Rivers, Dams and Hydrology

12d Model handles very large datasets and interfaces with a wide range of analysis packages, making it perfect for flood studies and the management of rivers and dams.

12d has partnered with industry leading analysis software, allowing users to apply 2D drainage analysis from within 12d Model.



Environmental

12d Model's ability to handle very large datasets combined with flexible and comprehensive 3D analysis and modeling tools make it perfect for a wide variety of environmental projects.

Existing workflows can adopt 12d Model easily as it allows users to directly interface with GIS systems and most software packages and file formats.

Why Choose 12d?

- **Powerful data processing & intelligent functionality.**
- **Modular, easy to update & completely customisable.**
- **Seamless integration with major industry software and hardware.**
- **Used in over 55 countries worldwide.**
- **Friendly support & training from industry experts.**

AMERICAS: Vancouver
 E sales@12d.com
 P +1206 905 1464

AUSTRALASIA: Sydney
 E sales@12d.com
 P +61 2 9970 7117

EUROPE: London
 E sales@12d.co.uk
 P +44 845 051 0372

12d Solutions Pty Ltd PO Box 351
 Narrabeen NSW 2101 Australia
 © 2013 12d Solutions Pty Ltd

