

Mapping Software

This is the second Product Survey on Mapping Software, the first having been published in February 2004. Support for web-based services is becoming increasingly relevant, including within an interactive environment, for example with links to GPS. However, paper-based visualisation with support in the printing process is still of considerable significance.

Visualisation and presentation is the final stage of any activity and process involving geo-data and geo-information. As a result, designers and developers of mapping software have to address an abundance of issues stemming from previous stages in the geo-information processing cycle. These include interoperability, the wealth of geo-reference systems, de facto industrial and local standards, internationally accepted standards such as OGC and geo-referencing standards, and the need for software accessibility to mainstream geodatabases including Oracle, SQL Server, ESRI Arc SDE, MySQL, IBM DB2 and IBM Informix. Open Database Connectivity-compliant sources and the way users are brought up in map reading have also to be addressed. All this comes together in map reproduction, either on screen or on paper.

The functionality to support building geo-data-sets which are consistent, accessible, reliable and complete is still of the utmost importance when producing maps. Maps are the final product and should be quickly understood by users. This applies not only in the so-called "developed world" but even more so in the "developing world". Open Source software and services based on open standards could be further developed, solutions have to be found for integrating the expertise of producers of mapping software. Developing countries have a responsibility to recognise this when introducing specifications for understandable maps, and this is no easy task.

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