



DataNovata: The Universal Web Based Data Enquiry Tool

DataNovata produces – automatically – every possible logical view of the database contents, so that any user or statutory requirements now or in the future are satisfied.

A logical view is one which follows the natural database hierarchy as defined in the database metadata. For example, the user can easily see invoices received for individual suppliers, invoice items, delivery notes, payment history and so on. As this effectively replicates the enquiry facilities in the original application, **DataNovata is the best answer to the problem of maintaining continued access to data when the original application is no longer operational.**

It is easy to use in the hands of a non-technician and specifically designed to enable full logical navigation of an existing database. Because of its abilities to follow the logical paths and relationships of the data it is also a potentially powerful forensic tool for the detection of fraud.

DataNovata has the potential to replace all enquiry facilities in existing applications. In designing an application the designer has to second guess what sort of reports or enquiries the user might want to make. The application user then needs to be trained in how to make the enquiries and how to write the reports. Each application has its own idiosyncrasies, and the knowledge acquired in using one application is not transportable to another. DataNovata could become the universal tool for all application developers.

In contrast, BI tools are not designed for such tasks, and hand-written SQL will usually be both error-prone and considerably more expensive.



DataNovata has been likened to a number of other technologies or methodologies. Here are some of the questions we are sometimes asked:



We already have Business Objects/Cognos (or some other BI tool). Why can't I just use that?

DataNovata is not a Business Intelligence tool. BI tools – such as Business Objects or Cognos – are not designed to take a logical view of a database, as an application would. These tools exist to provide historical, current, and predictive views of business operations in order to support business decisions (hence the term Decision Support software which is sometimes used).

BI tools are designed to trawl through vast amounts of data – typically held in a Data Warehouse – and analyse it to support business decisions. For performance reasons, data which is intended to be used in this way is sometimes summarised as it is stored on the database or analytical databases are used for very fast retrieval.

DataNovata is designed to interrogate and navigate data at a detailed level, and is therefore conceptually quite different from BI tools. DataNovata and BI tools are therefore complementary rather than competitive.



We are going to use a specialised Archive solution – surely I won't need anything else?

Analytical Databases

Analytical databases are designed for very fast retrieval so that the data may not need to be reduced to summary level to achieve reasonable performance. Well-known suppliers of analytical databases include Kognitio, Clearpace and Sand Technologies. These databases do not hold any of the logical relationships used by the original application. They may also specialise in the ability to compress the data for storage, or represent data in non-proprietary XML.

DataNovata contains an interactive Data Structuring tool to suggest and test such relationships, which allows the user to quickly re-establish the original logical database view. These relationships are stored separately and are used by DataNovata without compromising the analytical nature of the database, allowing the full power of DataNovata to be deployed.



Specialised Archive Solutions

Specialised Archive Solutions sometimes use analytical databases but in general they provide archive solutions for well-known “premium” IT products such as SAP, Oracle E-Business, Siebel etc. as well as extending to other products – including bespoke – and to total lifecycle management. Major players in this area include Optim (from IBM) and Informatica. Some also extend their abilities to include “legacy” systems, i.e. those without an existing relational database.

Generally, neither specialised database vendors nor archive solution companies offer their own proprietary means of retrieving the data. The intention is to store data such that it can be retrieved by some SQL-based means, but the method chosen is left to the customer.

DataNovata can work with any structured database. NSC – the company behind DataNovata – has extensive data migration skills but if the data is already in an appropriate format so much the better.



We have SQL skills – surely we can just write whatever SQL we need?

The arguments in favour of an off-the-shelf solution rather than a bespoke one are much the same as they always are. SQL Queries can be created manually against any structured relational database. SQL is the standard way to access modern databases and all products - including DataNovata – use it.

DataNovata generates every possible view for you, and if the generated views need additional tailoring, DataNovata has many features which facilitate this for the developer and the end user.

By contrast, with manually-written SQL each view has to be created individually. As the creation of every possible view by this means is likely to prove impractical, the manual SQL approach relies on the user knowing in advance what the required views are. It also relies on the fact that this will not change, otherwise the SQL writer (who may well work for a different part of the company, and/or be unavailable) would need to be reengaged to create more SQL.

Establishing user requirements which are not subject to future revision is one of the most difficult aspects of any project. There may be additional problems establishing appropriate levels of data security, whereas DataNovata already contains built-in facilities to address such requirements.

So why hand-write SQL to create your own database enquiry system when DataNovata does it all for you?