



Whitemarsh

Information Systems Corporation

Database Objects

The Foundation Stones of Enterprise Database

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README.1ST

There are generally considered to be three classes of objects: display objects, wholly contained process objects, and business objects. Display objects embrace buttons on a screen, a drop list of menu choices, a graphical user interface (GUI), or complete engineering drawings. Wholly contained process objects are for example, the COSINE function, a nautical distance function that when given two geographical coordinates returns the geographic distance between them, or a well defined process that takes standard arguments and returns a specific value such as asking for the net asset value for a business given all assets and liabilities. Finally, business objects encompass business components like an insurance policy that performs in a certain manner.

All three object classes have their proponents and detractors. What all three object classes have in common is that they are first and foremost self contained software in the form of an executable or embedded process that behaves according to certain fixed rules. *This book is about none of them.* So, if you want a book about any of the these three well known objects, then this is not that book.

This book is about database objects, a concept that shares some common names and some common definitions as the other three object types. Because of common names and some common definitions, the reader may initially be confused as to the nature of database objects. Database objects however, are unique to database. They are identified, designed, implemented, operated through, evolved, or maintained through just one type of data processing facility, a database management system (DBMS). If the available DBMS is an ANSI SQL:1999 DBMS then database object definition and use can be direct. Otherwise, database objects can only be indirectly approached through proprietary facilities in one or more DBMSs.

Notwithstanding the availability of SQL:1999 and 2003 DBMSs, database objects are absolutely essential to understand, specify, implement, and maintain world-wide heterogeneous database. Without adopting a database object approach enterprise database failure is certain.

Database objects are not new. They were started in certain DBMS types in the late 1960s. Relational DBMS, however, stopped the march to database objects. It was not until the ANSI SQL:1999 data model moved away from the relational model and not until a whole programming language was incorporated into ANSI SQL:1999 that the march towards database objects was restarted. Even if the twenty-year delay had not happened, computers, networks, languages and operating systems were just not sophisticated enough to make database objects successful.

