

Archived content. No warranty is made as to technical accuracy. Content may contain URLs that were valid when originally published, but now link to sites or pages that no longer exist.

Visual Basic 4.0 Technical Articles

Mapping the Data Access Object: DAO 3.1 (for ODBC Direct Data Sources)

Ken Lassenen

Microsoft Developer Network Technology Group

January 31, 1996

Abstract

This article presents a graphic map of the Data Access Object (DAO) object model, version 3.1, as the model applies to Open Database Connectivity (ODBC) data sources connected directly to DAO rather than to the Microsoft® Jet database engine (as was required in previous versions). This is an implementation of features found in the Visual Basic® 4.0 Remote Data Object (RDO). The map shows the new DAO 3.1 properties, methods, and child objects available when directly connected to an ODBC data source.

Data Access Object 3.1

The Data Access Object (DAO) version 3.1 object model for Open Database Connectivity (ODBC) direct data sources presented in this article is a subset of the full DAO version 3.1 object model. The objects, methods, and properties shown are those that apply only to ODBC direct data sources.

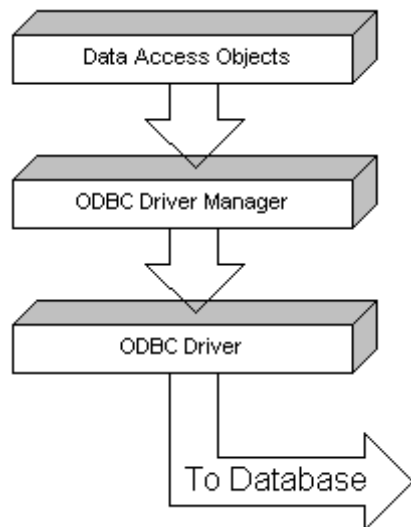


Figure 1. Relationship between Data Access Object 3.1 and other data components

DAO is available in Visual C++® and many products based on Microsoft® Visual Basic® for Applications. These products include Microsoft Excel version 5.0 and later, Microsoft Access 95, Visual Basic version 4.0, and Visual C++ version 4.0. DAO may be used from any DAO 3.0 licensed host that can call an OLE Automation server, such as Microsoft Project. For information on using DAO, see your product documentation and search the Microsoft Development Library. The bibliography directs you to some key articles. DAO has gone through several versions, as shown in Table 1.

Table 1. DAO Version Used in Various Microsoft Products

DAO version	Microsoft products
1.0	Visual Basic 2.0, Visual Basic 3.0, Microsoft Access 1.1

The objects and collections in Figure 2 are defined in Table 2.

Table 2. Object and Collection Definitions

Object or Collection	Definition
DBEngine object	Is the top-level object, representing the data source—the Microsoft Jet database engine or an ODBC data source. Contains and controls all other objects in the hierarchy of data access objects.
Workspaces collection	Contains all Workspace objects of the DBEngine object.
Workspace object	Defines a session in a specific environment, for example, Jet or ODBC. It contains open databases and ODBC connections and provides mechanisms for simultaneous transactions.
Databases collection	Contains all open Database objects opened or created in a Workspace object.
Database object	Represents an open database.
Errors collection	Contains all stored Error objects, each of which pertains to a single operation involving data access objects.
Error object	Contains details about each data access error thrown from a single operation.
Connections collection	Contains all stored Connection objects of a Workspace.
Connection object	Is a network connection to an ODBC direct data source (Microsoft Windows NT™ SQL Server, ORACLE®).
QueryDefs collection	Contains all QueryDef objects in a Connection object.
QueryDef object	Is a stored definition of a query. Off of a Connection object, this is the prepared statement on the ODBC source.
Parameters collection	Contains all the Parameter objects of a QueryDef object.
Parameter object	Is a parameter associated with a QueryDef object created from a parameter query.
Recordsets collection	Contains all open Recordset objects in a Database object or in a Connection object.
Recordset object	Consists of the records in a base table or the records returned from a query.
Properties collection	Contains all the Property objects for a specific instance of an object.
Property object	Is a built-in characteristic or a user-defined characteristic of a data access object.
Fields collection	Contains all stored Field objects of a Recordset object.
Field object	Is a column of data with a common data type and a common set of properties.

Bibliography

Lassesen, Ken. "[Mapping the Data Access Object: DAO 3.0.](#)" (MSDN Library, Technical Articles)

Lassesen, Ken. "Using Microsoft OLE Servers to Develop Solutions." (MSDN Library, Technical Articles)

[Manage Your Profile](#) | [Legal](#) | [Contact Us](#) | [MSDN Flash Newsletter](#)

© 2007 Microsoft Corporation. All rights reserved. [Terms of Use](#) | [Trademarks](#) | [Privacy Statement](#)

