SequeLink Server for ODBC Socket

Overview

DataDirect SequeLink is highly scalable, server-based middleware that gives you a complete platform for data connectivity. SequeLink Common Servers offer the performance of direct, native data access and the flexibility of an *n*-tier ODBC Socket to access virtually any other data source in the enterprise. SequeLink Server for ODBC Socket is an available option for DataDirect SequeLink Clients for ODBC, JDBC, ADO, and .NET.

The SequeLink Clients include drivers or data providers that leverage the SequeLink 5.4 Servers for a complete data access solution. Each Client consists of a single, standards-based client component, the SequeLink Common Server DBMS interface, and value-added services to enhance security and performance, simplify deployment and administration, and exploit the latest DBMS, network, and operating system features.

This document discusses the various deployment options and system requirements for the SequeLink Server for ODBC Socket.

SequeLink Server for ODBC Socket

Traditional client/server middleware has typically been deployed in a 2-tier, point-to-point architecture. For example, the SequeLink 2-tier deployment option involves the installation of the SequeLink *for* ODBC Client on client desktop machines and native SequeLink Servers on existing DBMS server machines. However, for maximum flexibility or centralized access requirements, SequeLink server-based middleware can be installed on intermediate server machines between the client and database server systems. This is known as an *n*-tier architecture, offering a variety of benefits to the IT organization. In this deployment option, SequeLink provides all the benefits of single, universal client components and value-added services such as security, administration, and portability, while extending access to virtually all data in the enterprise.

The SequeLink Server for ODBC Socket effectively turns the SequeLink Server into an application server. This option allows organizations to access virtually any ODBC-compliant database from within the SequeLink environment, but through a scalable *n*-tier architecture. The basic deployment architecture is shown in Figure 1.

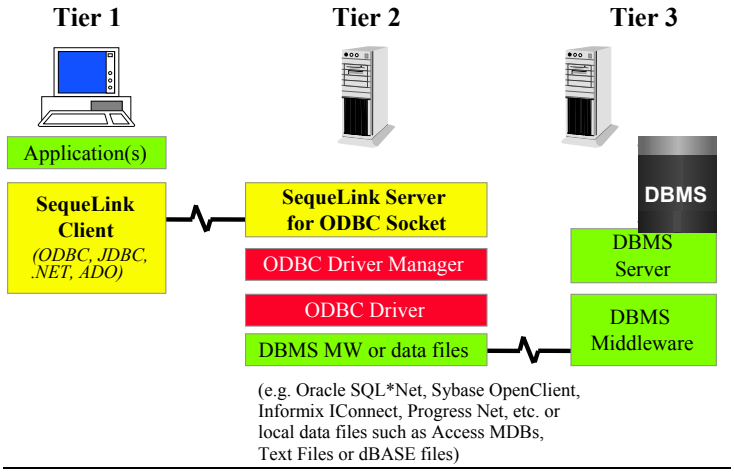

Figure 1

The SequeLink Server for ODBC Socket protects investments in existing data and systems by allowing organizations to access additional data through the SequeLink environment, from personal databases such as dBASE, Microsoft Access, and text files, to major relational DBMSs such as PROGRESS or RdB, to legacy enterprise systems such as VSAM, IMS, or ISAM. As future demands for data change, SequeLink Server for ODBC Socket assures the flexibility to rapidly incorporate new systems. Further, the *n*-tier option enables access to database server platforms where native SequeLink Servers are not specifically available, but compatible DBMS vendor middleware and ODBC drivers are available, such as Oracle or Sybase servers hosted on platforms like SCO, Silicon Graphics IRIX, or Sequent Dynix.

SequeLink Server for ODBC Socket availability and configuration

The SequeLink Server for ODBC Socket is available for Windows NT, Windows 2000, Windows Server 2003, Linux, Sun Solaris, IBM AIX, and HP-UX platforms. The SequeLink *for* ODBC driver, the SequeLink *for* JDBC driver, the SequeLink *for* ADO data provider, and the SequeLink *for* .NET data provider can leverage the ODBC Socket, offering a fully integrated solution.

Installation and configuration of the ODBC Socket is quite simple. Install the ODBC Socket, plus the specific ODBC driver for the data source you wish to access, on the server platform of choice. If you are accessing a flat file database, all you need is the ODBC driver and the data files. If you are accessing another database on another platform, you will need the ODBC driver plus any pre-requisite software to be installed on the SequeLink Server for ODBC Socket.

Accessing flat file databases from the SequeLink environment

The SequeLink Server for ODBC Socket can be used to access flat files or personal databases from the SequeLink environment. In this scenario,

SequeLink provides a more optimal client/server configuration, and can significantly boost performance and scalability across a large user base. It does this by eliminating the overhead of using network-level file system sharing across a server such as Novell or Windows 2000. In addition, because SequeLink Clients are available across a wide variety of platforms, other client applications can now gain access to flat file data not normally available to that platform.

Figure 2 shows an example where the clients of Tier 1 might be Java on a UNIX machine using SequeLink *for* JDBC to gain access to Microsoft Access files. The SequeLink *for* JDBC driver can be dynamically downloaded with an applet to the UNIX client (or other client platform). On the server side, the SequeLink Server for ODBC Socket for Windows 2000 is installed along with the Microsoft Access ODBC Driver and the Access MDB files.

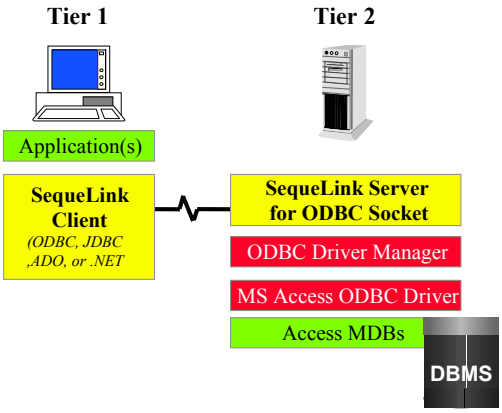

Figure 2

Accessing additional data stores from the SequeLink environment

The SequeLink Server for ODBC Socket allows all SequeLink Clients (ODBC, JDBC, .NET, and ADO) to access additional databases not natively supported by SequeLink Servers through the SequeLink environment, such as PROGRESS, or Legacy databases such as VSAM or IMS.

Figure 3 shows an *n*-tier architecture for accessing PROGRESS data. In this scenario, the SequeLink *for* ODBC driver might be installed on a Windows 2000 client running a Visual Basic application. On the middle-tier server, the SequeLink Server for ODBC Socket for Windows 2000 is installed, along with the DataDirect Connect *for* ODBC driver for PROGRESS 9 and the PROGRESS Net middleware.

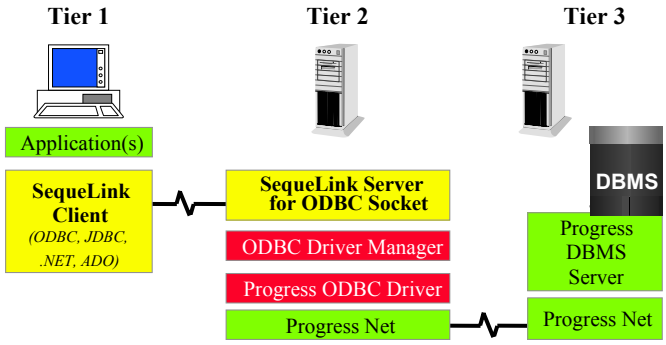

Figure 3

Deploying an *n*-tier architecture for multiple databases

Some organizations may wish to fully deploy an *n*-tier architecture for access to all their corporate data to streamline administration and centralize access through a small specified group of servers. In this configuration, the organization can gain the benefit of installing and maintaining a single, universal ODBC driver, ADO data provider, or .NET data provider (or downloadable JDBC driver) on their clients, and move multiple ODBC drivers and DBMS vendor middleware to the centralized servers.

Figure 4 shows a typical *n* -tier architecture for an environment where end users need access to three different databases: PROGRESS, Oracle, and DB2. The 2-tier machine running the SequeLink Server for ODBC Socket could be a series of AIX servers across multiple office sites of a decentralized organization. The individual ODBC drivers for PROGRESS, Microsoft Access, and VSAM, plus their client middleware of PROGRESS Net, SQL*Net, and DB2 Client Access, are moved to the server.

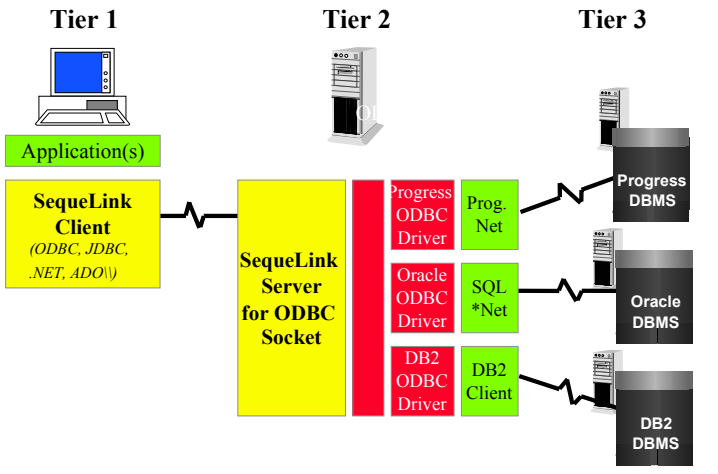

Figure 4

Compatibility and certification of server ODBC drivers

SequeLink Server for ODBC Socket for Windows NT, Windows 2000, and Windows Server 2003

- Provides ODBC API support for Core, Level 1, and nearly all Level 2 and SQL Grammar of Minimum and Core
- Requires ODBC drivers that conform to the ODBC specification version 2.*x*, 3.0, or 3.5*x*
- Requires ODBC drivers that provide Minimum ODBC API conformance of Core and Level 1

SequeLink Server for ODBC Socket for UNIX (Sun Solaris, IBM AIX, and HP-UX)

- Provides ODBC API support for Core, Level 1, and nearly all Level 2 and SQL Grammar of Minimum and Core
- Requires ODBC drivers that use the UNIX ODBC Driver Manager version 3.0 or later
- Requires ODBC drivers that provide Minimum ODBC API conformance of Core and Level 1

FOR MORE INFORMATION

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