



PROGRESS® DATADIRECT CONNECT® for ADO.NET

Progress® DataDirect Connect® for ADO.NET is the industry’s only suite of ADO.NET data providers with a 100% managed architecture, eliminating the need for database clients, boosting performance, and delivering a flexible, secure connection to Oracle, DB2, Sybase, and Microsoft SQL Server.

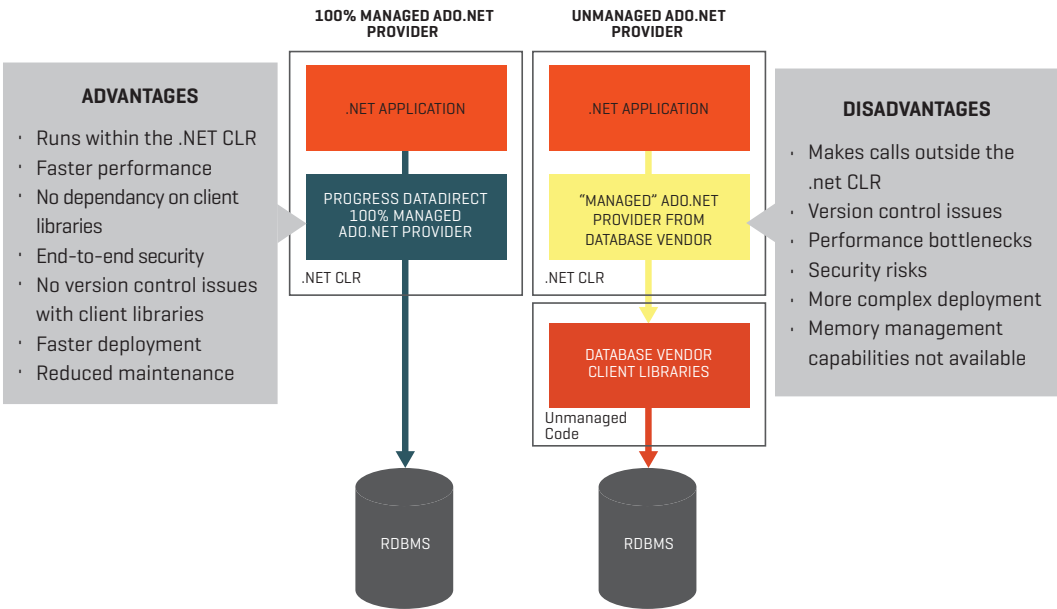
ZERO NEED FOR DATABASE CLIENT SOFTWARE WITH 100% MANAGED ARCHITECTURE

All Progress DataDirect Connect for ADO.NET data providers are 100% managed, which allows .NET applications of all kinds to experience the following benefits:

- ▶ Eliminates the need to install, configure, and deploy database client libraries such as Oracle SQL*Net
- ▶ Provides superior application performance and scalability while demanding fewer CPU, memory, and network resources
- ▶ Leverages the automated memory and object management and Code Access Security features of running entirely within the CLR
- ▶ Allows “side-by-side” installation of .NET assemblies that each require connectivity to different versions of a particular database

HIGHLIGHTS

- ▶ 100% managed architecture
- ▶ Zero need for client database software
- ▶ Unparalleled .NET throughput and CPU and memory efficiency
- ▶ Supports ADO.NET Entity Framework (EF 4.0 and 1.0), LINQ, and key .NET development contexts
- ▶ Secure connection to Oracle, DB2, Sybase, and Microsoft SQL Server



SUPPORTS KEY .NET DEVELOPMENT ENVIRONMENTS AND TECHNOLOGIES

Progress DataDirect Connect for ADO.NET supports many of the latest .NET technologies, including:

- ▶ ADO.NET Entity Framework [EF 4.0 and 1.0]
- ▶ LINQ to Entities
- ▶ Entity SQL [ESQL]
- ▶ NHibernate
- ▶ Microsoft Enterprise Libraries [DAAB - Data Access Application Block]
- ▶ ADO.NET Bulk APIs
- ▶ .NET Framework 4.0
- ▶ ADO.NET 2.0 [Common Programming Model]

Delivers up to **225%** more throughput over competing data providers

Up to **400%** more CPU efficient than competing data providers.

Smaller memory footprint than competing data providers—in some cases uses **25%** less memory

KEY FEATURES				
Performance	Security	Enterprise Application Functionality	Provider Functionality	.NET Framework
100% managed code architecture delivers more throughput while using fewer CPU, memory, and network resources Visual Studio-integrated Performance Tuning Wizard Multiple connection tuning options Bulk load operations via ADO.NET Bulk APIs Connection pooling and pool management Statement caching Optimized data, data type conversions Tunable socket, array size, and DataSet management Batching and network tuning optimization	End-to-end secure access to sensitive data Operating system authentication [i.e., Single Sign-On or SSO] via Kerberos SSL data encryption Optimal use of .NET Framework security controls	Connection failover and load balancing Bulk load operations via ADO.NET Bulk APIs Side-by-side installation ClickOnce deployment Interoperability between databases and different versions of each database	No need to deploy database client libraries—ever! Support for ADO.NET Entity Framework [EF 4.0 and 1.0], LINQ, and Entity SQL Support for Microsoft Enterprise Libraries Seamless integration with Visual Studio 2005, 2008, and 2010 One provider supports all versions of a database Statistical counters integrated with Windows Perfmon Full Unicode and ANSI character set support Built-in runtime troubleshooting and tracing capabilities Advanced data type support	Support for .NET Framework 2.0, 3.0, 3.5, and 4.0 ADO.NET 2.0 conformance

UNPARALLELED .NET PERFORMANCE AND SCALABILITY

Progress DataDirect Connect for ADO.NET data providers have been benchmarked against other providers for a variety of database operations. In our test methodology, we compare the capacity and efficiency of the providers by isolating and testing these key variables: throughput, CPU efficiency, and memory usage.

- ▶ **Superior throughput**—Progress DataDirect throughput is unmatched, in some cases delivering up to 225% more throughput over competing data providers. Progress DataDirect provider throughput stays high and even increases as more users are added.
- ▶ **Greater CPU efficiency**—Progress DataDirect providers use considerably fewer CPU cycles to deliver superior throughput than competing data providers. In some cases, Progress DataDirect providers are over 400% more CPU efficient than competing data providers.
- ▶ **Smaller memory footprint**—Progress DataDirect providers are 100% managed, so the overall memory footprint will be significantly less because competing providers require applications to call out to unmanaged code in the database client libraries. In some cases this smaller memory footprint means using less than 25% of the memory of competing data providers.

With a faster, more resource-efficient data provider, you need less hardware to support your applications. This is particularly meaningful when your application is sharing resources with other applications deployed on a single server or running in a resource-limited environment typical of virtualization.

To learn more or download a free, 15 day trial of Progress® DataDirect Connect® for ADO.NET, go to www.progress.com/datadirect

TECHNICAL SPECIFICATIONS

Databases Supported

- ▶ Oracle 8i, 9i, 10g, and 11g
- ▶ IBM DB2 UDB on:
 - > Linux, Unix, and Windows - 7.x, 8.x, V9.1 V9.5
 - > z/OS - 7.x, 8.x, V9.1
 - > iSeries [AS/400] - V5R1, V5R2, V5R3, V5R4, V6R1, V7R1
- ▶ Sybase Adaptive Server [ASE] 11.x, 12.x, 12.5.x, 15.0, 15.5
- ▶ Microsoft SQL Server 2000, 2005, and 2008

Client Platforms

- ▶ Windows
- ▶ 2000/XP/2003/Vista/2008/7
- ▶ 32-bit and 64-bit editions

PROGRESS SOFTWARE

Progress Software Corporation [NASDAQ: PRGS] is a global software company that simplifies the development, deployment and management of business applications on-premise or in the cloud, on any platform or device, to any data source, with enhanced performance, minimal IT complexity and low total cost of ownership.

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