Connect to a data source using ADO.NET

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.NET Data Providers

- System.Data.SqlClient
 - SQL Server and Windows Azure SQL Database (SQL Database, SQL Azure)
- System.Data.OleDb
 - OLE DB data sources such as Excel and MS Access
- System.Data.Odbc
 - ODBC data sources such as a text file or any ODBC compliant data source
- System.Data.OracleClient
 - □ Oracle 8.1.7 or later

http://tinyurl.com/matauor

Connection String for SqlClient

- Recommended minimum connection string with network security
 - Server=localhost; Initial Catalog=master; Integrated Security=true
 - Server=localhost; Initial Catalog=master; Integrated Security=SSPI
- Recommended minimum connection string with SQL Login
 - Server=localhost; Initial Catalog=master; User Id=userid; Password=xyz
 - Server=localhost; Initial Catalog=master; UID=userid; PWD=xyz



About the Server keyword

- Can contain the protocol used to connect (tcp, np, rpc, lpc...)
- Can be an IP Address, a server name
- Can contain a Port number (default 1433)
- Can specify a named instance of SQL Server
- □ **Ex**:
 - Server=[protocol:]SERVER_OR_IP[\instancename][,port]
 - Server=tcp:DEVDSK02\SQL2012,5000

A Few Connection Options for SqlClient

- SSL Encryption for the duration of the session
 - Encrypt=true (default false)
- Connection timeout when waiting for a connection
 - Connection Timeout=60 (default 15)
- Application name description
 - Application Name='ADO.NET Demo Application'
- Connection pooling maximum size
 - Max Pool Size=200 (default 100)

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Connection String for OleDb

Minimum connection string for SQL Server

Provider=sqloledb; Data Source=localhost; Initial Catalog=master; User Id=userid; Password=xyz



Minimum connection string for Excel

- Provider=Microsoft.Jet.OLEDB.4.0; Data Source=c:\myexcelfile.xls;
- Additional settings for Excel
 - HDR=Yes means that the first row contains headers
 - □ IMEX=1 reads all data as text

http://tinyurl.com/mwj33ub

Conclusion

- Connection String basic requirements
- Overview of SqlClient
- Overview of SqlConnectionStringBuilder
- Opening database connections



Looking at established connections using T-SQL