The CONNXStore Database Server: A native Win32 port of PostgreSQL from UNIX to the Win32 environment

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In order to expand the capabilities of CONNX, CONNX Solutions decided to add a native port of the open source database PostgreSQL 7.0 in 2001. By March of 2002, the port of PostgreSQL 7.1.3 to Win32 was completed, and a complete regression test passed with zero failures. The result was the CONNXStore database system.

CONNXStore does not require any special libraries or non-native Win32 utilities (such as Cygwin) in order to function correctly. Additional relevant PostgreSQL utilities, such as initdb and psql, were ported in native mode as well.

The list of unique features of CONNXStore includes a full-featured ODBC 3.61 driver, an OLE DB Provider, a Pure Java JDBC Driver, and a managed .NET data provider for use with Visual Studio .NET. The list of features exposes the power of PostgreSQL to the latest Windows-based programming languages and development environments.

The CONNXStore database system allows persistent relational operations against non-relational systems. The CONNXStore database is also in complete compliance with ANSI/ISO standards, offering exceptional performance and reliability. By leveraging a 16- year development history, CONNX possesses a rock-solid database system with reliable transaction support that is also fully ACID-compliant.

The CONNXStore database system offers direct benefits to our customer base by providing delivery of advanced capabilities in an easy-to-use Windows Service package. Furthermore, all of the available books and manuals for administration and optimization of PostgreSQL systems can be used to obtain the largest possible benefit from CONNXStore.

The development department at CONNX has resolved many of the thorny technical issues, such as the lack of "fork()" under the Windows operating system family, and the inadequacy of the C standard library for handling date and time information. The result is a high-performance, native Win32 database system that delivers reliable and meticulously documented results.

The CONNXStore system has been put through its paces in a large number of real-world installations. Repeatedly processing millions of transactions in a very short time window, we have proven consistency and reliability. Additionally, CONNX has passthrough query capability, so that even queries which would normally be rejected by standard ODBC can be processed on the target system. CONNX can also run queries though psql so that current scripts can be utilized without a large conversion effort.

The bottom line is that CONNX Solutions has produced a native version of a highly capable and reliable tool that produces tangible value added for our large customer base.