

Linux & SAMBA as a host for DataFlex databases

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Objective

In August, 2004, a research project was initiated at Data Access Worldwide (Miami) to investigate the feasibility of using a Linux Server to support Visual DataFlex and character mode DataFlex 3.2 applications in different scenarios. Two system configurations were tested:

1. Visual DataFlex or DataFlex 3.2 applications running on Windows client workstations using SAMBA to connect to DataFlex embedded databases hosted on a Linux server
2. A dual-client configuration composed of the above configuration running concurrently with a DataFlex 3.2 Linux character mode application (i.e. Linux clients) accessing the same DataFlex embedded databases hosted on a Linux server.

Exhaustive tests were run using Data Access Worldwide's standard database test suites. The test suites are designed to exercise and stress test database operations and transaction processing on a defined server platform as a prospective host for DataFlex embedded databases. The tests return PASS/FAIL results.

Results

Configuration 1 – Visual DataFlex or DataFlex 3.2 Console Mode applications running on Windows clients accessing DataFlex embedded databases hosted on a Linux server through a specifically configured SAMBA connection returned PASSing results. Although these tests passed, we do not formally support this configuration (it will not be tested with each product release, etc.). Details of the Linux/SAMBA server configuration that was used in our tests can be found at:

<http://www.dataaccess.com/KBPrint.asp?ArticleID=848>

Configuration 2 – FAILing results were returned when testing both Linux and Windows clients concurrently accessing a DataFlex embedded database hosted on Linux. Considerable research was done to determine if system tuning or configuration changes could produce a Linux server platform usable for concurrent access from the two different client environments. Even after researching and testing several different configurations, FAILing results were returned. This configuration is UNSUPPORTED and NOT RECOMMENDED by Data Access Worldwide. Our research indicates that the issues causing this configuration's tests to fail are caused by cross-platform SAMBA caching; the SAMBA issues are not related to the particular operation of our products.