4D Development - Programming Multi-User

Level 3 Course
Course Duration : 2 day
Course Code : 4D-DEV4

About the Course

4D Server is a Client/Server Development environment that is both powerful and scalable. This course gives delegates an in-depht understanding of the issues facing developers of multi-user systems written in 4D.

Benefits

• Learn how to program a multi-user database system.
• Undestand how to deal with record locking conflicts.
• Learn how to maintain performance in a multi-user environment.
• Learn about 4D's powerful multi-purpose architecture.
• Understand the detail of inter process communication.
• Learn how to use stored procedures and distributed processing effectively.
• Understand Transactions and Triggers.
• Understand 4D memory requiriments.

Prerequisites

It is recommended that you have attended our Level 2 4D Development - Programming Introduction course (4D-DEV2) or that you are familiar with the 4D Programming concepts and the 4D programming language.

What Next ?

4D Development - Programming - Advanced (4D-DEV3)
4D Development - Programming - Web Integration (4D-DEV5)
Bespoke Training

Course Content

Client/Server Programming • The 4D Architecture • Unified Client/Server • Network Considerations • 4D Client - what is created where • Single File on NTFS.
Record Locking • Locked Records • Load and Unload Record • Read Only and Read Write • Locked Attributes • Record Selections & The "LockedSet".
Database Methods • When executed • When to use • On Server Startup and Shutdown • On Server Open Connection and Close Connection.
Database Properties and Settings • Properties Dialog • Memory Considerations • Database Parameters • Tuning.
Processes • Process Concepts • Creating a Process • Local Processes • Process Atributes.
Inter Process Communications • Semaphores • Process Communications • Process Variables • Synchronous vs Asynchronous operations.
Stored Procedures • Execute on Server • Variable Scope.
Distributed Processing • Register and Unregister Client • Automatic Registration • Execute on Client.
Transactions • 4D Implementation • Simple Transactions • Advanced Transactions • Managing Transactions • Working with Selections inside a Transaction • Transaction Do's and Don'ts.
Triggers • Anatomy of a 4D Trigger • Trigger Level and Trigger Properties.
Cross Platform Considerations • 4D Transporter • Fonts and Form Design • Understanding the ASIFONT.MAP File • Plug-ins • Code Bracketing Techniques • Interface Considerations • Character Sets • Document Management.

To make a course booking or to discuss your training requirements, please call us on **020 8245 4545** or email **training@mehdiward.com**.