

# *Integrated Simulator Module*

Central Signal Database Solutions

## Characteristics:

- High-grade HIL\* - Signal Database Solution
- Object Databases with postgresSQL, Oracle, MS SQL, MySQL and DB2
- Operating System Independent Server-Client Integrations with Java, HTML, Tcl/Tk and QT
- Adapted ODBC-Interface Modules for individual Database Handling
- Functional I/O-Signal and Parameter Storage for Test Management and Offline Evaluation
- Integrated User and Privileges Handling
- Flexible Adjustment to the FTI HIL Simulator with complete Registration of the integrated Hardware
- Full acquisition of the functional I/O-Hardware and intercommunication Properties
- Automatic Identification of System Modifications
- Dynamic Mapping of the current Sensor Configuration
- Signal Management with I/O-Tracing
- Observance of I/O-Signal Conditioning
- Central storage for additional System Expansions (Calibration-, Measurement and Service Applications)
- System and Signal Configuration Control

\* Hardware in the Loop

## Multiprocessor architecture

The high-grade signal database solution is based on actual object database systems like postgresSQL, Oracle, MS SQL, MySQL and DB2 to offer a highest degree on data consistence and extensibility.

Operating system independent client applications written in Java, HTML, Tcl/Tk and QT provide a maximum in flexibility and coverage.

Additional ODBC-interface modules with a universal operator interface, designed for individual database handling and comfortable data preparation.

The main functionality of the signal database is to provide the I/O-signals of the hardware in the loop and it is fully customizable to all kind of test environments.

Additional parameters of the RT-system like I/O-sensors and conditioning parameters will be provided for a comprehensive test management and offline evaluation.

The integrated user and privileges handling ensure a classified access to the operator environments.

The overall I/O and communication facility of the HIL-simulator is represented by the signal database structure and verified by the scanning mechanism to offer a consistent mapping of the signal flow between the unit under test and the simulator.

