

Lesson 3 Database Basics and Table Structure

StudioWorks uses a Microsoft Sql Express database to store information. The database is often referred to as the *back end* of a data software program. A *relational* database contains *tables* of data that are linked together with the use of *key fields*. Each table can contain multiple *records* and *fields*. You can think of a record as a row, and a field as a column. The following table called SAMPLE has four fields named ID, NAME, PHONE and CELL. It contains 3 records.

SAMPLE

ID	NAME	PHONE	CELL
1	Ed	555-1234	555-4321
2	Jon	555-0123	555-0321
3	Al	555-0987	

SQL (pronounced see-qual) stands for Sequential Query Language and is used to access data from one or more tables. To retrieve all the data from the above table you could write `SELECT * FROM SAMPLE`. To get all the data for every person with the name of Jon, `SELECT * FROM SAMPLE WHERE NAME = 'Jon'`.

We'll save the more advanced details for a latter lesson. For now it is sufficient to know that SQL is used to retrieve, add, modify or delete data.

StudioWorks is a visual user interface to the studioworks.mdf database. You do not need to know SQL to use the software effectively, but familiarity with the tables and fields can help you get the most out of the program.

The first table we will look at is the **SCHED** table. It gets an entry for every income type.

FIELD NAME	DESCRIPTION
SCHED_NO	The unique record ID
CUST_ID	The client ID
STUDIO	The studio ID
DESCR	Description
SCHED_DATE	Date
START_TIME	Start time
STOP_TIME	Stop time
UDF_1	The project or class ID
UDF_2	= 'FIRST' if the first entry for a project or class.
UDF_3	Reserved for future use
BILLABLE_HOURS	Hours billed
TOTAL_HOURS	Actual hours
SCHED_TYPE	The type of entry: 'Schedule', 'SALE' or 'MISC'

The **LEDGER** table stores income amounts.

FIELD NAME	DESCRIPTION
LEDGER_NO	The unique record ID
SCHED_NO	The SCHED entry the record is tied to
CUST_NO	The client ID
AMT_DUE	The total amount due
AMT_PAID	The amount the client paid
LEDGER_TYPE	'SCHED', 'SALE' or 'MISC'
UDF_1	The Project or Class ID
UDF_2	Reserved for future use
UDF_3	Reserved for future use
TAX_1	Sales tax amount
TAX_2	Local tax amount
SUB_TOT	Total due before tax
ITEM_ID	'SCHED', 'SALE' or 'MISC'
LEDGER_DATE	The date of the transaction

When a session is scheduled, a sale made or misc. income inserted, entries are created in SCHED and LEDGER that are linked together by the SCHED_NO fields found in both tables.

Sales use the **LEDGERLINES** table to store the data on each item of the sale.

FIELD NAME	DESCRIPTION
LINE_SEQ	The line number
LEDGER_NO	The unique LEDGER_NO to tie to
ITEM_ID	The ITEM_ID of the sales item
QTY	The number sold
SUB_TOT	Total before tax
TAX_1	Sales tax amount
TAX_2	Local tax amount
TOT	Total

The **ITEM** table is where information on items you sell is stored.

FIELD NAME	DESCRIPTION
ITEM_ID	The unique record ID
DESCR	Description
COST	Your cost of the item (To be used in a future release)
PRICE	The amount you sell the item for
TAXABLE_1	= 1 if item has sales tax
TAXABLE_2	= 1 if item has local tax
UDF_1	= 'TRUE' if the item is a class
UDF_2	Reserved for future use
UDF_3	Reserved for future use

The **CUST** table holds information on your clients. CLIENT_ID is the unique client identification field. The fields prefixed with CONTACT_ contain information on the contact person. The fields that begin with ALT_ are for info on other persons associated with the client, other band members for instance. The UDF_1 field is for email. The other two UDF fields are for storing backup media information.

The **CONTROL** table holds contact information of your studio. This info is used on printouts. UDF_1 holds the starting time you prefer for the schedule grid. The other two UDF fields are for future use. Only one record is allowed by the software.

The **STUDIO** table contains data on the individual studios in your facility. At least one studio must be setup to use the software. You are free to use the UDF fields in this table for whatever you like.

PAIDOUT is the ledger table for your expenses.

FIELD NAME	DESCRIPTION
PAIDOUT_NO	The unique record ID
PAID_TO_ID	The ID of the vendor payment was made to
DESCRIPTION	The expense description
CAT	The ID of the expense category
AMT_PAID	The total paid
TAX_PAID	The tax paid
SUB_TOT	The total before tax
UDF_1 2 and 3	Reserved for future use
DAT	The transaction date

The **PO_CAT** table holds info on your expense categories. The only two fields are CAT_NO, the unique ID and DESCRIPTION.

PO_TO is the vendor information table.

FIELD NAME	DESCRIPTION
PAID_TO_ID	The unique record ID
NAME	The vendor's name
ADDRESS_1	Vendor's address
ADDRESS_2	“
CITY	“
STATE	“
ZIP	“
PHONE	Vendor's telephone number
ACCT_ID	Your account number
DEFAULT_CAT	The default category ID for the vendor

Last we have the **PROJECTS** table to hold information on project rates and classes.

FIELD NAME	DESCRIPTION
PROJECT_ID	The unique record ID
DESCRIPTION	Description of the project or class
PRICE	The price of the project. Classes are set to zero.
UDF_1	= 'TRUE' if the entry is a class
UDF_2	For additional info you want to save
UDF_3	“
TAX_1	Sales tax amount
TAX_2	Local tax amount
TAXABLE_1	= 1 if sales taxable
TAXABLE_2	= 1 if local taxable
TOTAL	The total price of the project. Classes are set to zero.