CATBASE TABLE STRUCTURE

If you're not familiar with the terminology used in this Tutorial - such as what tables, fields, records, and relations are - please read our Database 101 tutorial first.

ORGANISING YOUR DATA INTO TABLES

You're in complete control when it comes to setting up your tables and fields, and the relationships between those tables.

Think about the data that you are going to publish, and how it is structured. You need to have a clear picture of how your data is organised into tables and fields, and how the tables relate to each other.

Let's look at some examples ...

Type of publication ▲	Tables (suggested) ⬍	Relationships ⬍	Comments ⬍
Simple telephone directory	Listings	None	Just one table is used. This is also known as a flat-file database.
Product catalogue with options (eg different colours, sizes, parts, etc.)	Products Parts	Products<->Parts	Each Product can have any number of Parts, and each Part can belong to any number of Products. This is a many-to-many relationship. You'll be able to publish a catalogue showing each product's details, plus a list or table of all its parts.
Parts catalogue with products from multiple Suppliers, plus contact details for various people at each Supplier.	Suppliers, Contacts, Products, Parts	Suppliers->Contacts; Products->Suppliers; Products->Parts	Each Supplier can have any number of Products and any number of Contacts; Each Contact belongs to one Supplier; Each Product belongs to one Supplier, and may have any number of Parts; Each Part belongs to one or more Products. You'll be able to produce: a catalogue sorted by Supplier a contact directory showing each Supplier and their Contacts, or each \Contact and their Supplier a price listed sorted by Product or Part a Parts list etc.
Business Directory	Companies, Employees	Companies->Employees	Each Company can have any number of Employees; each Employee belongs to one Company. When you publish the directory, you can show each company's basic details (name, address, etc.) and then follow that with a list of its employees. Conversely, you could produce a directory sorted by employee, with information about each employee's company.
Simple telephone	Listings	None	Just one table is used. This is also known as a flat-file database.

You can set up any number of tables and add any number of fields to each table.

The data that is maintained in these tables will be used to create your publications. To add or modify your tables:
- Select the **Admin** tab
- Expand the **Database Setup** topic on the left
- Select the **Table and Field Setup** sub-topic

RELATIONS

With each table relationship, one table is the "parent" and the other is the "child." Table relationships can be many-to-many or many-to-one.

MANY TO MANY RELATIONSHIP

Each "parent" record can have any number of "child" records related to it, and each "child" record can belong to multiple "parent" records.

MANY TO ONE RELATIONSHIP

Each "parent" record can have any number of "child" records, but each "child" record can be related to only one "parent" record.

See our Relations Reference for more information about how to create and maintain related data.

Of course, you can also have tables that are not related!

If you're not sure how to organise your data into tables, please <u>contact us</u> with a description of your project. We'll be happy to help you figure out the best way to do it.

HOW TO PUBLISH RELATED DATA

In your <u>Publishing Stylesheet</u>, create a Paragraph for the related data.
In that Paragraph, add one **Element**.
For that element, select the <u>Element Type: Relation</u>, and choose the appropriate relationship. In the four-table example shown above, you would see two possible choices for the Suppliers table:

- Suppliers->Contacts
- Suppliers->Products

The Relation Element creates a window into the related table, allowing you to add data from that related table.

Learn more about the various <u>Element Types</u>.