

**TUTORIAL 4**  
**BUILDING DOCUMENTS FROM SINGLE TEMPLATES**



**DEMONSTRATION EDITION**



## Please Consider

If you have not already done so, it might be helpful for you to have a read through the LinkUP! User Manual either before you perform this tutorial or afterwards. In particular the Concepts Chapter will help you to get a better grasp of the terminology and technologies involved. The manual also contains explanations of the various LinkUP! Palettes that will be used during this tutorial. The LinkUP! User Manual has been included in your download or on the CD-ROM.

For this tutorial our data source will be locally stored LinkDB files. These are database files created from ASCII text files using our LinkDB utility. The LinkDB Utility is available free of charge and can be found on the MC Research Website and the LinkUP! CD-ROM. Again, a fuller explanation of LinkDB and working with ASCII text files is provided in the Manual.

## Tutorial 4 - Building a Document Automatically

### Overview

In this tutorial you will see LinkUP! automatically create a Used Car Guide using a predefined template. This is achieved by using not one, but three different tables in a relational database. A relational database can be thought of as a series of 'mini-databases' which may be dynamically linked (If you would like to know more about relational databases, please read the Relational Reference Chapter in the LinkUP! User Manual). The important point to take away from this tutorial is that there has been no coding or tagging in the database. All of the layout has been done in XPress and is maintained when the publication is built using LinkUP! This tutorial also introduces the use of automatic Header/Footer generation.

Although we are using a Used Car Guide for this tutorial, I'm sure you will be able to see that this process equally holds for producing any structured or semi-structured publications.

### Requirements

#### LinkUP! 68k XTension for Macintosh

- QuarkXPress 3.32r5 or 4.03
- System 7.5
- 32MB RAM with at least 8MB assigned to QuarkXPress

#### LinkUP! PPC XTension for Macintosh

- QuarkXPress 3.32r5 or 4.03
- System 7.6 or 8.0
- 32MB RAM with at least 10MB assigned to QuarkXPress

Updaters for both QuarkXPress 3.32v5 and version 4.03 have been included on the CD in the 3rd Party Folder. These are also available from Quark's Website ([www.quark.com](http://www.quark.com)). Although LinkUP! will run without both of these Updaters, there are several known bugs in the non-updated versions of XPress that will adversely effect LinkUP! 7s performance and could compromise your document's integrity. We would therefore strongly recommend installing the appropriate Updater.

### Installation



You will need the **LinkUP! 7 LinkDB Demo** XTension installed to be able to work through these tutorials successfully. This is achieved as follows;

### What do you Install?

When you install LinkUP! on a computer alongside a copy of XPress the main LinkUP! program effectively becomes part of your copy of XPress.

A new menu, 'LinkUP' appears at the right-hand end of your QuarkXPress menubar as below.



You will require the following components for this tutorial;

- LinkUP! 7 LinkDB XTension
- Tutorial Files

The first thing you need to do is copy these components from the LinkUP! CD-ROM to your hard disk (If you downloaded the demo then this will not be necessary so skip to the *Installing the XTension* section below).

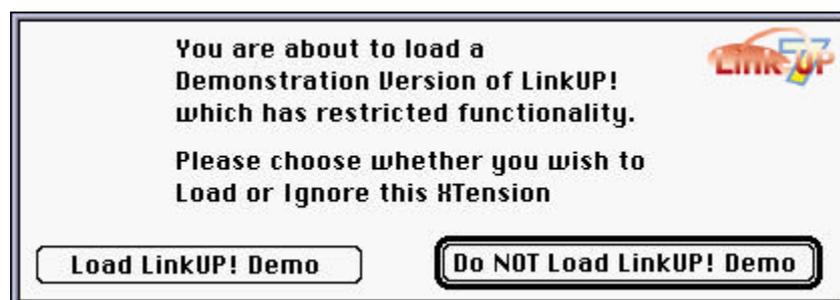
1. Insert the CD-ROM into the disk drive
2. Copy the LinkUP Folder into a location of your choice on your computer

### Installing the XTension

With all the files now installed onto your hard disk it is now necessary to copy the LinkUP! XTension into the **QuarkXPress/XTensions** folder. This will cause LinkUP! to be automatically loaded when QuarkXPress is loaded.

3. Locate the **QuarkXPress/XTensions** folder on your hard disk
4. Locate the **LinkUP! 7 LinkDB Demo** XTension file either from within the **LinkUP/Program Files/LinkUP! 7 XT LinkDB (ASCII)** folder you have just copied to your hard disk or from within your download
5. Copy the **LinkUP! 7 LinkDB Demo** file into the **QuarkXPress/XTensions** folder

Provided you followed the instructions above correctly you have now installed the LinkUP! XTension on your computer. To verify that the LinkUP! XTension is correctly installed where QuarkXPress will recognise it, you should now try and load XPress in the normal manner. If everything has installed correctly, then you will see an alert similar to the one below, as soon as XPress loads.



## Making it Happen

All the files necessary for the successful completion of Tutorial4 are located in the **Tutorial4** Folder that you downloaded or copied from the CD-ROM to your hard disk during the installation. All of the pictures for this tutorial are stored within **Tutorial Files/Pictures2** Folder.

1. Launch QuarkXPress with the LinkUP! XTension properly loaded as specified above.  
You will need the **LinkUP! 7 LinkDB Demo** XTension
2. Locate and open the **Tutorial4** document that was copied across during the installation (it's located in the **Tutorial Files/Tutorial4/Documents** Folder)

The main topics that will be covered in this tutorial are;

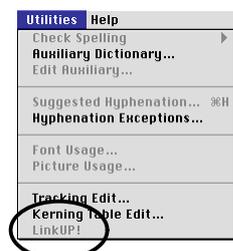
- Building your Document
- Updating Headers and Footers

### Initial Configuration

If you take a look at the document you will see we have a three column chained text box containing a single template that will be used to hold the manufacturer, model and edition information for this Used Car Guide.



1. Switch LinkUP! on by selecting **LinkUP!** from the **Utilities Menu**.



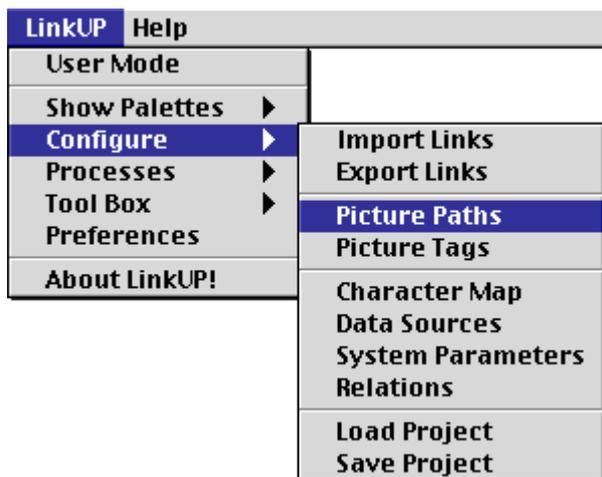
You will notice that most of the elements on the XPress page now have underlines. These underlines signify that the underlined elements are linked in some way to an item in a database. In other words LinkUP! knows and understands the relevance of each element. These underlined items have been 'marked up'. You can learn how this is achieved in **Tutorial 2 - Preparing a document for LinkUP!**

Before we build the page it is necessary to tell LinkUP! where both the pictures and the data you wish to work with are located. LinkUP! works with absolute paths so when you downloaded or copied the files from your CD-ROM to your hard disk, the paths changed. We'll start with the picture paths.

### Setting up Picture Paths

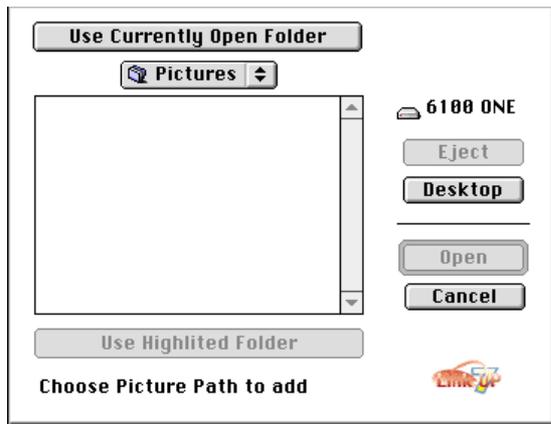
An unlimited number of picture paths can be set for any one document so you can point LinkUP! to use Low Res. pictures during the design stage and then point it to the High Res. images on your OPI server when the time comes to output the film. Alternatively you can simply use the same images throughout the production cycle.

To configure your picture paths;



2. From the LinkUP! Menu, select **Configure Picture Paths**
3. Click the **Add** button
4. Browse your computer to find the location of the pictures. (They will be located in the **Tutorial Files/Pictures2** Folder copied to your hard disk during the installation)
5. Click either the **Use Currently Open Folder** Button if you are inside the **Pictures2** folder, otherwise highlight the **Pictures2** folder and click the **Use Highlighted Folder** Button.

You will see that the new picture path has been added.



6. Click the **OK** button

### Setting up the Data Sources

The next process is to tell LinkUP! where to find the data needed for building the document. We are working with 3 different data sources in this tutorial. One contains all of the information on the car manufacturers, one contains all of the information on the car models of all of the manufacturers and the third table holds the information on all of the editions of the car models. We will therefore need to tell LinkUP! where each of these data sources is stored. As you are working with LinkDB files it is simply a case of letting LinkUP! know which Folder contains the LinkDB files you are to work with. LinkUP! comes with a 'learn' feature that gives it the ability to learn all of the necessary information about a data source without you having to type it all in. We'll use this function now.

To edit your data source settings;

7. From the LinkUP! menu select **Configure Data Sources**



8. Select the **Manufacturer** Data Source
9. Click the **Edit** Button

You are now presented with a dialogue similar to the one below;

LinkUP! Alias Name:	Manufacturer
System Data Source Name:	LinkDB
User Name:	NTS
User Password:	
Login Database:	Tutorial4:Data:Manufact.LNK.DB
Table/View:	Manufact.LNK.DB
Where:	
Order By:	

Buttons: Learn, Cancel, OK

The data for this tutorial is held in the **Tutorial4/Data** Folder

10. Click the **Learn** Button

11. You will now need to locate your data (located in the **Tutorial4/Data** Folder)

12. Click either the **Use Currently Open Folder** Button if you are inside the **Data** folder, otherwise highlight the **Data** folder and click the **Use Highlighted Folder** Button.

NB. YOU WILL NOT BE ABLE TO SEE THE AVAILABLE FILES IN THIS BROWSE WINDOW, BUT THEY ARE THERE.

Providing you have chosen the correct location, you are now presented with a list of LinkDB files located in this folder, **Manufact.LNK.DB**, **Model,LNK.DB** and **Editions.LNK.DB**.

13. Select **Manufact.LNK.DB** and click the **OK** button

LinkUP! has now automatically re-configured itself to the new location of the Manufacturer data source. Your dialogue will look similar to the one below apart from the Login Database will contain your local path to the data.

LinkUP! Alias Name:	Manufacturer
System Data Source Name:	LinkDB
User Name:	NTS
User Password:	
Login Database:	Tutorial4:Data:Manufact.LNK.DB
Table/View:	Manufact.LNK.DB
Where:	
Order By:	

Buttons: Learn, Cancel, OK

14. Click **OK** to return to the Available Data Sources Dialogue

You will now need to **repeat steps 8 - 14** for both the **Model** and **Edition** Data Sources. Make sure you select the **Model.LNK.DB** and **Editions.LNK.DB** files respectively when using the learn function.

15. Once you have reconfigured all three Data Sources, click the **OK** button on the Available Data Sources Dialogue to finish

### Building the Document

All of the initial configuration is now complete. LinkUP! knows where the pictures are stored and also where all of the Data Sources are located. These two actions are one-off actions. You need only perform these two configurations once. You are now ready to build the QuarkXPress document.

16. From the LinkUP! menu select **Show Palettes Data Viewer**

17. Click the text cursor into the text box containing the template (very important)

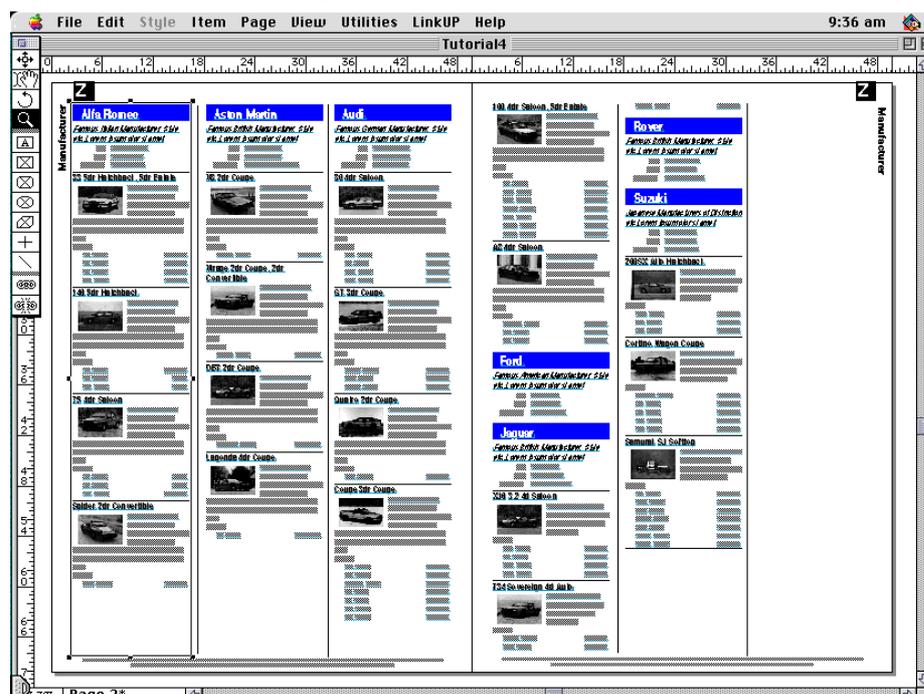
18. Hold down the **Option Key** on your keyboard and click the Build Button  on the Data Viewer Palette

LinkUP! will pop up the following warning;



19. Click the **OK** button

LinkUP! will now build the document for you, automatically inserting as many pages as are necessary. The following is a representation of how your built page will look;



If LinkUP! fails to build the document, close the document and start Tutorial 4 again, making sure you follow the instructions carefully. In particular, make sure you have placed the cursor in the template and that you hold down the **Option Key** while clicking the build button.

## What Happened?

It might be helpful for you to understand what LinkUP! is doing as it assembles the pages. As we stated earlier, this is being built from a relational database. The relational database contains three hierarchical levels, Manufacturer, Model and Edition. Each Manufacturer in the database has a number of models, and each model has a number of editions. The first thing LinkUP! does is find out how many manufacturers there are in the Manufacturer Table. It then brings all of these onto the XPress page. LinkUP! then goes to the Model Table and finds all of the models for each manufacturer and places them onto the page. Finally LinkUP! looks in the Edition Table and finds each edition for each model of each manufacturer. The result, a fully built Used Car Guide in minutes, complete with all of the pictures. Notice how LinkUP! has created the correct number of models for each manufacturer by expanding the list and the same with the editions of each model.

You will also be able to see that all of the elements on the page that were underlined in the original template are still underlined for all of the manufacturers, models and editions. This signifies that they are all marked up, i.e. linked to the database. If a price changes at the last minute or you happen to find a spelling mistake, you have the ability to update the XPress page from the database without rebuilding it, or alternatively send any changes to the XPress page back to the database. All of the styling on the XPress page is maintained unless you specifically ask LinkUP! to do otherwise.

## Updating Headers and Footers

A tedious part of putting together a publication such as this, is keeping all of the conditional headers and footers up-to-date on each page as the pagination changes. In the case of this tutorial we have a letter at the top of each page which is derived from the first letter of the first manufacturer on the page. We also have the manufacturer name along the left and right edges of the spread. Using LinkUP! these can be dynamically updated to reflect the current page as often as you like. So if an advertisement is dropped in at the last moment, causing all of the pages to re-flow, it is a simple matter to update the header and footer information.

Lets do this now for the page you have just built.

1. From the LinkUP! Menu select **Processes Create Header/Footer**
2. Select **L1\_Name** from the list of fields and release the mouse button

You have instructed LinkUP! to update all of the headers and footers in the document that are based on the field L1\_Name, which happens to be the field containing the Manufacturers Name. Once this process is complete, the header and footer information will be updated to reflect the manufacturer at the beginning and end of each page. The picture below shows the results for the left-hand page.

**A**

**Alfa Romeo**

**Alfa Romeo**

*Famous Italian Manufacturer. Style  
etc. Lorem ipsum dolor si amet*

Tel: [0038 112 4444](tel:00381124444)

Fax: [0038 334434](tel:0038334434)

Web Site: [www.alfa.com](http://www.alfa.com)

Hopefully this tutorial you have just worked through will have demonstrated the speed, power and accuracy of LinkUP! in building QuarkXPress documents from database information. This process of building documents from single templates can easily be applied to many types of publication such as directories, TV and Radio Guides and many more.

## Further Tutorials

There are currently five Tutorial Files available for LinkUP! 7;

- Tutorial 1 - Updating a QuarkXPress Document
- Tutorial 2 - Template Building
- Tutorial 3 - Preparing a document for LinkUP!
- Tutorial 4 - Building Documents from Single Templates
- Tutorial 5 - Building Documents from Multiple Templates

Please keep an eye on the MC Research web site for new Tutorials covering a range of applications for LinkUP! including;

- Creating a Directory
- Creating Retail Flyers
- Using LinkUP! with Holiday Brochures
- Creating Property Guides

---

MC Research Ltd  
Suite A, Squires House  
81-87 High Street  
Billericay  
Essex CM12 9AS, UK

Tel. +44 (0)1277 632887  
Fax. +44 (0)1277 632023  
email. [mail@mcresearch.co.uk](mailto:mail@mcresearch.co.uk)

<http://www.mcresearch.co.uk>

---

