

NAME

cable_labels – Spreadsheet, database, and forms example for creating printable cable labels

DESCRIPTION

The **cable_labels** package comprises an example spreadsheet describing the ends of each cable within a system, an example document for printable form stock and instructions for generating the labels.

FOO AC 1.1 EQP C12 SRVA 022 - AC1 EQP C12 PDUA R05 - 2	FOO AC 1.2 EQP C12 SRVA 022 - AC2 EQP C12 PDUB R03 - 8	FOO AC 2.1 EQP C12 SRVB 018 - AC1 EQP C12 PDUA R05 - 3	FOO AC 2.2 EQP C12 SRVB 018 - AC2 EQP C12 PDUB R03 - 7
FOO AC 3.1 EQP C12 SWB R09 - AC EQP C12 PDUA R05 - 5	FOO AC 4.1 EQP C12 PDUB R03 - AC EQP C12 PDUB R03 - 5	FOO AC 5.1 EQP C12 SWA R11 - AC EQP C12 PDUA R05 - 1	FOO AC 6.1-1 EQP C12 TH R40 - AC EQP C12 PDUB R03 - 9
FOO AC 6.1-2 EQP C12 FANS R43 - AC	FOO KVM1 EQP C12 KVM 027 - 1	FOO KVM2 EQP C12 KVM 027 - 2	FOO LAN 1.1 EQP C12 SRVA 022 - ETH1

DATA SOURCE

Data comes from a spreadsheet (.ods) file which is then 'connected' to a database (.odb) file. The reason for using spreadsheets as the source is that they are easy to automate using cell references and data lookups.

Upon connection to a database, each sheet in a spreadsheet file appears as a separate table, the fields of which may be inserted in a LibreOffice 'form letter' document. The **first row** of the cable data spreadsheet will be used by the database to name the table fields, while subsequent rows will be treated as the table records.

Two records are entered per cable description; the first record describes the 'local' end of the cable (from) and the second record describes the 'far' end of the cable (to). The example labels, above, comprise three rows: The system and cable identification appear in the first row, the 'local' end in the second row, and the 'far' end in the third row.

Labels are created in two passes. The first pass will create the 'local' end descriptions for all cables and the second pass will create the corresponding 'far' end descriptions. Therefore 'local' and 'far' end records should be reversed for the second pass, and this is achieved by using the "Sort" tool at print time, with the **Cable_ID** as the primary key and the cable **End** as the secondary key.

The example **Cable_List.ods** is made up of two sheets. The first sheet includes an **Equipment** table with equipment location and placement information; the second sheet names the signals, forms the cable identification and specifies slot and port connections, while drawing location information from the first sheet.

DATABASE CREATION

Once the spreadsheet is completed, a corresponding database needs to be created, using the spreadsheet as its data source, and registered in the local LibreOffice environment. The following lines summarize the

LibreOffice Base commands to perform this feat.

- Start **LibreOffice Base** (Select database) -> **Connect to an existing database** (select **Spreadsheet** from the drop-down list) -> **Next**
- Set up Writer Document or Spreadsheet connection - Set up a connection to spreadsheets -> Browse -> Path to the Spreadsheet file (**Select Spreadsheet file**) -> **Next**
- Save and proceed - Decide How to Proceed After Saving the Database
 - Yes, register the database for me
 - Open the database for editing
 - > Finish -> (**Provide a name for the new database**)

Note: Make sure you name the registered database '**Cable_List**' for the provided example form (**S200X150YAJ_CABLE_LABELS.odt**) to work.

While in the LibreOffice Base workspace double click on the created **Tables** to see their contents.

Come print time, any changes in the source spreadsheet file will be reflected in the labels form document output.

FORM PREPARATION

The label form is created as a document file which should reflect the actual printable stock dimensions.

The attached example document **S200X150YAJ_CABLE_LABELS.odt**, created with **LibreOffice Writer** is used for printing onto Panduit S200X150YAJ self-laminating label stock, typically used for labelling UTP/FTP cables.

Following are the steps for creating such a document from scratch. Needless to say, the steps are applicable to any and all similar materials from other manufacturers.

- The specific labels come in Laser or Ink-Jet printable 8.5" x 11" (Letter size) sheets, with 6 rows of 4 labels each. The width of each label is 2.00" and the total height of each label, including the laminate, is 1.50" - hence the 200X150 part number.
- The label form document needs to contain table cells corresponding to the printable label area, and table cells corresponding to the clear laminate. Therefore a table with 4-columns and 12 rows is needed.
- Columns are 2" wide leaving 2 x 0.25" for the left and right margins. Odd rows representing the printable area are 0.50" high while even rows, representing the laminate are 1.00" high. The total height of the labels is then $(6 \times 0.50") + (6 \times 1.00") = 9"$. Make sure the '**Fit to size**' checkbox is not checked when defining row heights but be ready to uncheck while adjusting field contents.
- The top and bottom margins of the sheet are nominally 1.00". However, the top margin may need some adjustment depending on the particular printer model. The top margin is set to 0.96" for my Brother laser printer to compensate for a 0.04" hardware margin. The bottom margin can be set to any value between 0.00" and 1.00", as it is measured from the bottom.
- The printable area cells may also need some border area; Top/Bottom/Left/Right cell border padding has been set to 0.04" in the example document.
- The formatting in the example label form file is known to generate extra blank pages. The remedy is to select

File > Printer Settings > Options: Uncheck 'Print automatically inserted blank pages'

ADDING DATABASE FIELDS TO THE LABEL FORM DOCUMENT

The database should already be registered in the LibreOffice environment - check:

Tools -> Options -> LibreOffice Base -> Databases

otherwise you may add it to the Registered Databases:

Tools -> Options -> Databases -> New -> Browse -> (select database) -> Apply -> OK

Fields can then be inserted in the first cell of the document file by

Insert -> Field -> More Fields -> Database [Mail merge fields] -> [Database / Table / Field name]

Multiple fields can be entered (to be formatted later). Each cell should contain data from two records, corresponding to each end of the cable. The last entry for each record in the cell should be the **Next record** token:

Insert -> Fields -> More Fields -> Database [Next record]

It is prudent to format the label information cell using a 'Condensed' font, in order to include as much information as possible on the label. After all fields are formatted as needed in the first cell, its contents can be copied to all other cells in the page.

The information displayed on the page, nominally the field titles or the field names, may not (read: will not) fit in the defined cell area. If you need to change a cell's content or formatting, you may temporarily activate the **Fit to size** option in the Row Height selection (**Right-click on the row of interest > Size > Row Height**). In order to see the actual source of each data element click on **View > Fieldnames**. This last selection is vital in order to clearly see where each **Next record** field is inserted within the cell.

Note that the last 'next record' token in the last cell on the page should be omitted, as the next record is automatically selected for each new page. Always check whether the first label on the second page contains the correct information.

GENERATING THE LABELS

The labels are generated from the label form document by selecting **File -> Print**.

LibreOffice puts out the message: **Your document contains address database fields. Do you want to print a form letter?** Select **Yes**; the database information appears in spreadsheet form.

- To generate the labels for the first (from) end of the cables, select the **Sort** tool (the icon shows up and down arrows) and sort by **Cable_ID (ascending)**, followed by **End (ascending)**.

- To generate the labels for the second (to) end of the cables, select the **Sort** tool (the icon shows up and down arrows) and sort by **Cable_ID (ascending)**, followed by **End (descending)**.

- Select **All** records, a range of records (**From** and **To**), or individual pairs of records to print (Ctrl/click above the **Record** rectangle next to the desired records).

- Select **File** from the **Output** selections to generate the output document (.odt, .pdf) or send directly to a printer. There is a selection to **Save as a single document** or **Save as individual documents**; the former is used for labels (the labels form takes up a single page which is repeated).

- Select **OK**; enter the output file name.

FILES

cable_labels.1	this file
Cable_Labels_1.pdf	generated example labels 'from' side
Cable_Labels_2.pdf	generated example labels 'to' side
Cable_Labels.eps	image for the postscript versions
Cable_List.odb	connected cable list database, needs to be created
Cable_List.ods	cable list - source spreadsheet
S200X150YAJ_CABLE_LABELS.odt	labels form document

REFERENCES - DISCLAIMER

<https://www.libreoffice.org/>

<https://www.panduit.com/content/dam/panduit/en/products/media/1/51/151/6151/110566151.pdf>

<https://www.panduit.com/content/dam/panduit/en/products/media/0/10/610/4610/111834610.pdf>

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