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# Using Label Merge Fields



R I M A G E <sup>TM</sup>



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# Using Label Merge Fields

Using CD Designer, you can merge data or graphic images to the label at the time of printing. Use these directions for CD Designer version 7.51 or later.

## Requirements

You need a CD Designer label with merge fields and a merge file containing the merge text or the path and filename of the graphic image.

**Note:** When merging graphic images, the graphic image type must be compatible with CD Designer.

The following sections provide specific instructions to properly create each of the two files.

### Merge file requirements

A merge file provides unique text for one or more discs. A merge file is usually exported from a database as a delimited text file.

**Tip:** You can also create a delimited text file using Notepad.

### Example of a merge file

This is an example of a delimited text file using merge text and graphic logos.

```
"Company", "PhoneNumber", "Date", "Logo"  
"Acme, Inc.", "800-555-5555", "May 14, 2004", "C:\Logos\AcmeLogo.jpg"  
"Rimage Corp.", "800-553-8312", "May 12, 2004", "C:\Logos\RimageLogo.jpg"
```

The first line, or 'header record', contains the field names that were defined in the label file using CD Designer. These are used by CD Designer and QuickDisc to properly match the merge data for the fields. The next two records contain three fields and the path and filename of the graphic image.

The text delimiter must have the quote, and comma to function properly with the **<a> Merge Field** object in CD Designer.

### Create a merge file

Follow these requirements to create a merge file:

- When using the **<a> Merge Field** object in CD Designer, use the quote and comma delimitation.
  - ⚠ **Important:** If you use another delimiter, you must use the Database Field object in CD Designer. Rimage recommends using the **<a> Merge Field** object.
  - Note:** If you use the **Database Field** object in CD Designer, you can get detailed instructions from the Rimage website. Refer to the *Using advanced merge field options in CD Designer* document.
- The first record, or line, must have the Field Names for each field. Database applications refer to this first record as a Header. The Field Names are used by CD Designer and QuickDisc™ to match the proper merge text, or graphic image.
  - Tip:** CD Designer can have a maximum of 99 fields per label file.
- The merge file must have the exact number of records to match the number of copies for an order. The maximum number of copies for an order is 9,999.



## CD Designer label requirements

When you create a label, add merge fields to your label.

1. From the *Toolbox*, select **Data Sources**.

**Note:** If the *Toolbox* is not visible, **Navigate:** View > Toolbar > Toolbox.

2. Drag a **<a> Merge Field** object from the *Toolbox* to the label. A dropdown menu displays.

3. From the dropdown menu, select **Create Text** or **Create Picture**. The merge text or graphic image is placed on the disc label.

4. Using your mouse, position the merge field object in the desired location.

**Tip:** Position the merge field so that the largest merge text does not extend off the edge of the disc.

5. Double-click on the merge field object. The *Modify Selected Text Object* dialog box opens.

6. In the **Field Name** field, enter the same Field Name used in the header (first row) of your merge file.

**Note:** The **Field Name** also displays in QuickDisc.

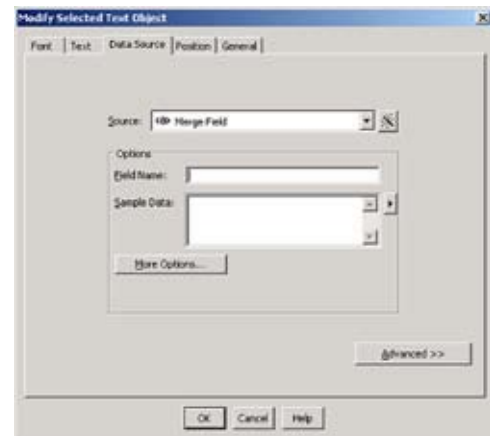
7. In the **Sample Data** field:

- If you are using text, you can enter sample text to display in the label. The sample data is substituted from the merge file.
- If you are using graphic images, you can enter the path and filename of the graphic image. The sample image is substituted for the merge file.

**Tip:** If you are using graphic images, you can use the **Object Reference Point** option in the **Position** tab to maintain a stable position.

8. Make other changes to your label.

9. **Save** the label.



## Using the merge label with the merge file

1. In the *QuickDisc wizard*, at the label selection prompt select the **merge label file**.

2. Select the merge file.

3. When using the **<a> Merge Field** object, select the *First record contains field names* checkbox. CD Designer requires this to match the merge text or graphic image, to the appropriate merge object on the disc. The merge file is now associated with the merge label.

4. Follow the onscreen prompts to complete the wizard.

## Using Rimage predefined merge fields

Rimage software understands certain predefined merge fields. These are useful in many situations. For example, If you are spanning discs and want **Disc # of #** to display on your labels, enter **RMG\_CurrentOfTotal** in the *Field Name* field at the time of label design.

 **Note:** When you use one of the Rimage predefined merge fields do not enter anything in the *Sample Data* field.

The following merge fields are available:

- **RMG\_OrderID** - Prints the ID of the job
- **RMG\_ServerID** - Prints the ID of the Production Server that processed the job
- **RMG\_ClientID** - Prints the ID of the client application which submitted the job
- **RMG\_CurrentOfCopies** - Prints the current number of the total copies for the job
- **RMG\_CurrentCopy** - Prints the current copy number for the job
- **RMG\_TotalCopies** - Prints the total number of copies for the job
- **RMG\_CurrentOfTotal** - Prints the current disc number of the total number of discs for the spanned disc job
- **RMG\_CurrentDisc** - Prints the current disc number for the spanned disc job
- **RMG\_DiscsInSet** - Prints the total number of discs for the spanned disc job

# Using Merge Files with Database Objects

Using CD Designer versions 6.0 through 7.51, you can use the Database Field object to merge data into the label at the time of printing.

If you have CD Designer version 7.51, Rimage recommends using the **<a> Merge Field** object. Refer to the *Using label merge fields* on page 1.

## Requirements

You need a CD Designer label with merge fields and a merge file containing the merge text or the path and filename of the graphic image.

**Note:** When merging graphic images, the graphic image type must be compatible with CD Designer.

### Merge file requirements

A merge file provides unique text for multiple discs. A merge file is usually exported from a database as a delimited text file.

**Tip:** You can also create a delimited text file using Notepad.

### Example of a merge file

This is an example of a delimited text file using merge text and graphic logos.

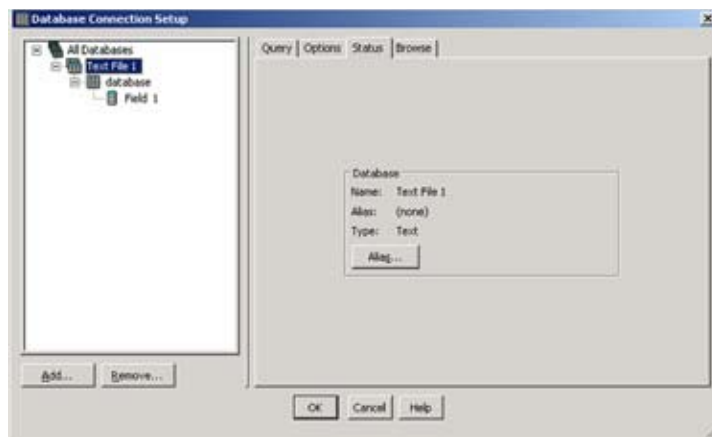
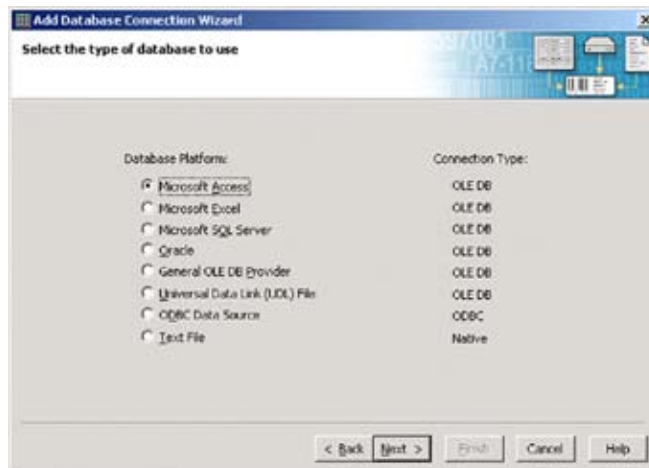
```
"Acme, Inc.", "800-555-5555", "May 14, 2004", "C:\Logos\AcmeLogo.jpg"  
"Rimage Corp.", "800-553-8312", "May 12, 2004", "C:\Logos\RimageLogo.jpg"  
"Crates & Boxes Company", "888-505-5555", "January 3, 2005", "C:\Logos\CBCLogo.jpg"
```

Each line, or record, contains the data to merge into the CD Designer label. Each field is separated by a text delimiter such as a comma and it has quotes for the text qualifier. The last item is the path and filename of the graphic image.

### Create a merge file

Create a merge file that meets the following specifications:

- When using the **Database Field** object in CD Designer, you can use any of the following delimiters: mixed quote and comma, quote and comma, comma, or tab.
  - Tip:** Rimage recommends that you use the quote and comma delimitation so the label can be tested in QuickDisc by typing in merge data.
  - Note:** If you use the **<a> Merge Field** object in CD Designer, you can get detailed directions from the Rimage website.
- Do not select a header or field names for the first row.





- Use the database wizard to properly match the merge text to the fields in CD Designer.
  - 📖 **Tip:** CD Designer can have a maximum of 99 fields per label file.
- The merge file must have the exact number of records to match the number of copies for an order. If you are using QuickDisc™, the maximum number of copies for an order is 9,999. If you are using another client application, the maximum number of copies for an order is 30,000 copies.

## CD Designer label requirements


Before you can add merge fields to a CD Designer label, a database connection is required. The database connection assigns each field in the merge file to a field number. The field numbers are selected automatically for each merge field on the label.

## Setup a database connection

Before you start, make sure the created merge file is on your hard drive.

1. Open **CD Designer**.

2. Set up a database connection.

- From the toolbar, select . The *Add Database Connection Wizard* opens.
- Select **Next**. The *Select the type of database to use* dialog box opens.
- Select **Text File**.

⚠ **Important!** The Rimage software can use only delimited text files.

- Select **Next**. The *Select the text file to read from* dialog box opens.

3. Select the merge file.

- Select **Select File**.
- Locate and select your merge file.
- Select **Next**. The *Specify field delimitation* dialog box opens.

4. Determine the type of delimitation.

📌 **Note:** If CD Designer analyzed the merge file properly, it should display the correct delimitation.

⚠ **Important!** If CD Designer does not detect the proper delimitation, you may be required to build the merge file again.

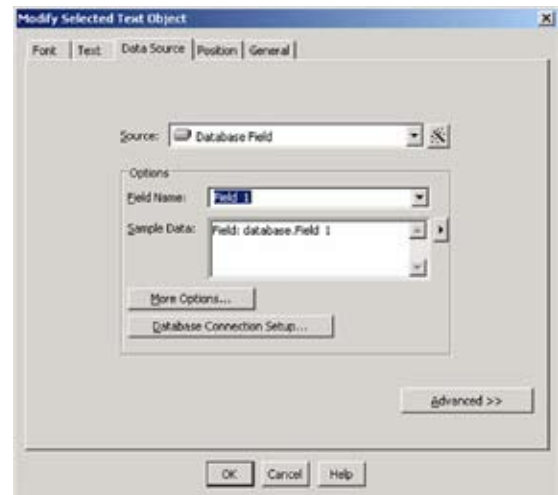
- Select **Next**. The *Select the format of the first row* dialog box opens.
- Select **No**. The Rimage software uses the first row of data to merge to the first disc instead of using a header.

5. Complete the database connection.

a. Select **Finish**. The *Database Connection Setup* dialog box is updated with the contents from the merge file.

b. Select **OK**. The *Database Connection Setup* dialog box closes.

📌 **Note:** To view the file contents, select **Browse**.





## Adding merge fields

When all the content is added to the label, add the merge fields.

1. Create a merge field on the label.

a. Select the merge object.

- To add merge text, select .
- To add a merge graphic, select .

b. Click on the label surface to add a merge object to the new label.

2. Double-click the new object. Either the *Modify Selected Text Object* or the *Modify Selected Picture* dialog box opens.


3. From the Source dropdown list, select **Database Field** or **Data Sourced Picture**.

4. From the *Field Name* list, select the desired field.

 **Tip:** If you cannot remember which field to select, use the **Database Connection Setup** button to view the contents of the merge file.

5. In the *Sample Data* field:

- If you are using text, you can enter sample text to display in the label. The sample data is substituted for the merge file.
- If you are using graphic images, you can enter the path and filename of the graphic image. The sample image is substituted for the merge file.

 **Tip:** If you are using graphic images, you can use the **Object Reference Point** option in the **Position** tab to maintain a stable position.

6. Add other merge fields as needed.

7. Save the label.

## Using the merge label with the merge file

1. In the *QuickDisc wizard*, at the label selection prompt select the merge label file.

2. Select the **merge file**. For details, refer to the QuickDisc online help.

3. When using the **Database Field** object, clear the *First record contains field names* checkbox. The merge file is now associated with the merge label.

4. Follow the onscreen prompts to complete the wizard.



# Using Merge Files with Acrobat PDF

Rimage recommends using CD Designer with merge fields when possible.

If you cannot use CD Designer to create labels, and merge fields are required, you can create an Acrobat file and a Form Data Format (FDF) file which contains the merge data. The Acrobat file must have form fields added to the label to receive the merge data.

## Forms Data Format (FDF) architecture

This section details the architecture of the Forms Data Format (.fdf).

### File structure

The FDF structured elements required for Acrobat forms data export and import are the Header, Body, and Trailer, as discussed below.

### Header

The first line of an FDF file specifies the version number of its subsuming PDF specification.

The current version of PDF is 1.4. The first line of an FDF file is: %FDF -1.4 (see the explanations for the functions FDFGetFDFVersion and FDFSetFDFVersion in the Adobe Forms Data Format Toolkit Reference manual).

### Body

The body consists of one Catalog object and any additional indirect objects that it may reference.

More detail can be found in the Forms Data Format Toolkit Reference manual.

### Trailer

The trailer consists of a trailer, followed by the last line of the FDF file, containing the end-of-file marker, %%EOF. The trailer dictionary consists of the keyword trailer, followed by at least one key-value pair enclosed in double angle brackets (<< >>). The only required key is Root, and its value is an indirect reference to the Catalog object in the FDF body.



## FDF Catalog Object

This table describes the dictionary entries that make up the value of the FDF key in the Catalog Object:

Key	Type	Semantics
Fields	array	This array contains the root fields being exported or imported. A root field is one with no parent.
F	File specification	Points to the Acrobat file (PDF document) into which this FDF data is to be imported.
ID	array	(Optional) The value of the ID field in the trailer dictionary of the PDF document that this FDF data was exported from, or is meant to be imported into.

## FDF Fields

This table describes the attributes of the text fields in the FDF used in the example.

Key	Type	Semantics
T	string	Form field name
V	various	Field value inserted into the form field.

## Sample FDF file

**Note:** Since the Acrobat FDF and PDF files are located in the same folder, the “file specification” has no path.

This example shows a sample FDF file (\$ stands for hexadecimal).

```


%PDF-1.2
%$E2 $E3 $CF $D3
1 0 obj
<<
/FDF << /Fields [ << /V (AcctNumber) /T (AcctNumber)>> << /V
(CompanyName)/T (CompanyName) >>
<< /V (SoftwareApplication)/T (SoftwareApplication)>> ]
/F (PDF_merge.pdf) >>
>>
endobj
trailer
<<
/Root 1 0 R
>>
%%EOF

```



## Create the Acrobat PDF label with form fields

Generate an Acrobat label file to the proper size. Many graphic applications can publish a PDF or export an Acrobat file. When the label file is created, the form fields can be added. This procedure matches the FDF file example above.

1. Open Adobe Acrobat 5.0 or higher full version (not Acrobat reader).
2. Open the **PDF label file**.
3. Create the **Form Field**.
  - a. From the toolbar, select the **Form Tool**.
  - b. To create a rectangular area for the intended merge field, click and drag the form tool. A *Field Properties* dialog box appears.
  - c. Enter or select information in the following fields:
    - *Name* – Type Company Name  
 **Note:** Select the **Options** tab if it is not selected.
    - *Default* – Type Name, Inc
    - *Type* – Select Text
  - d. On the *Appearance* tab, perform the following actions:
    - i. Deselect the **Border Color and Background Color** options.
    - ii. Select the **Font and Size**. The size value ensures the variable text does not go off the edge of disc.
    - iii. Set the Form Field to **Visible**.
    - iv. Select **OK** to save the new field.
4. Repeat step 3 to create two additional merge fields with the information in the following table.

Name Field	Default
SoftwareApplication	SoftwareApplication
AcctNumber	AcctNumber

5. Save the Acrobat label file in the \Labels folder of the Rimage System Folder.

## Implement Acrobat FDF with Rimage Software

Because the FDF file is usually generated by a custom application, the custom application would also submit the order. To test the function, follow these steps.

1. Place the Acrobat PDF and FDF files in the \Labels folder of the Rimage System Folder. The FDF file points to the location of the PDF file.
2. In the client application, select the FDF file. No merge file is required and the FDF file points to the PDF file.
3. Use the [Adobe FDF Software Development Kit](#) located on the Adobe website to create the FDF file. To test this function, use Acrobat to output an FDF file with the Export Form Data function.