



## **Fluid Management**

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# **TECH0274: Database Manager Instructions**

## **Summary:**

Describes how to use the Database manager to install ColorPro 4 SQL Server databases. Describes settings and data files. Describes startup modes: silent, automatic install, manual operation.

## **Details:**

The Database Manager.exe program provides a simple interface for installing, removing, activating, deactivating, updating and packaging databases within the FM\_Data architecture. The program also contains command line switches for operating in silent mode. Older database structures are updated automatically.

## **BASICS**

In order to have the installation/update process work you must have the following files in the same directory:

Database Manager.exe

FM\_DBUpdate.dll (for Database Manager v1.0.0.17 and later)

nsoftware.IPWorksZip.dll (for Database Manager v1.0.0.16 and earlier)

Ionic.Zip.dll (for Database Manager v1.0.0.17 and later)

Configuration.xml – See Appendix A for details

Database.zip – See Appendix C for details

## **COMMON FM\_DATA DATABASES**

Database Manager will create and install the common databases FM\_Brands, FM\_Log, and FM\_Queue if they are not present in the database folder.

## **CUSTOM FORMULA FM\_DATA DATABASES**

Database Manager will install custom formula databases included in the Database.zip file unless a custom formula database with the same name is already installed. This is done to preserve custom formulas created by the user.

## **RUNNING IN SILENT MODE**

The application can be run in silent mode from a command line. Please see Appendix C for silent mode command line switches.



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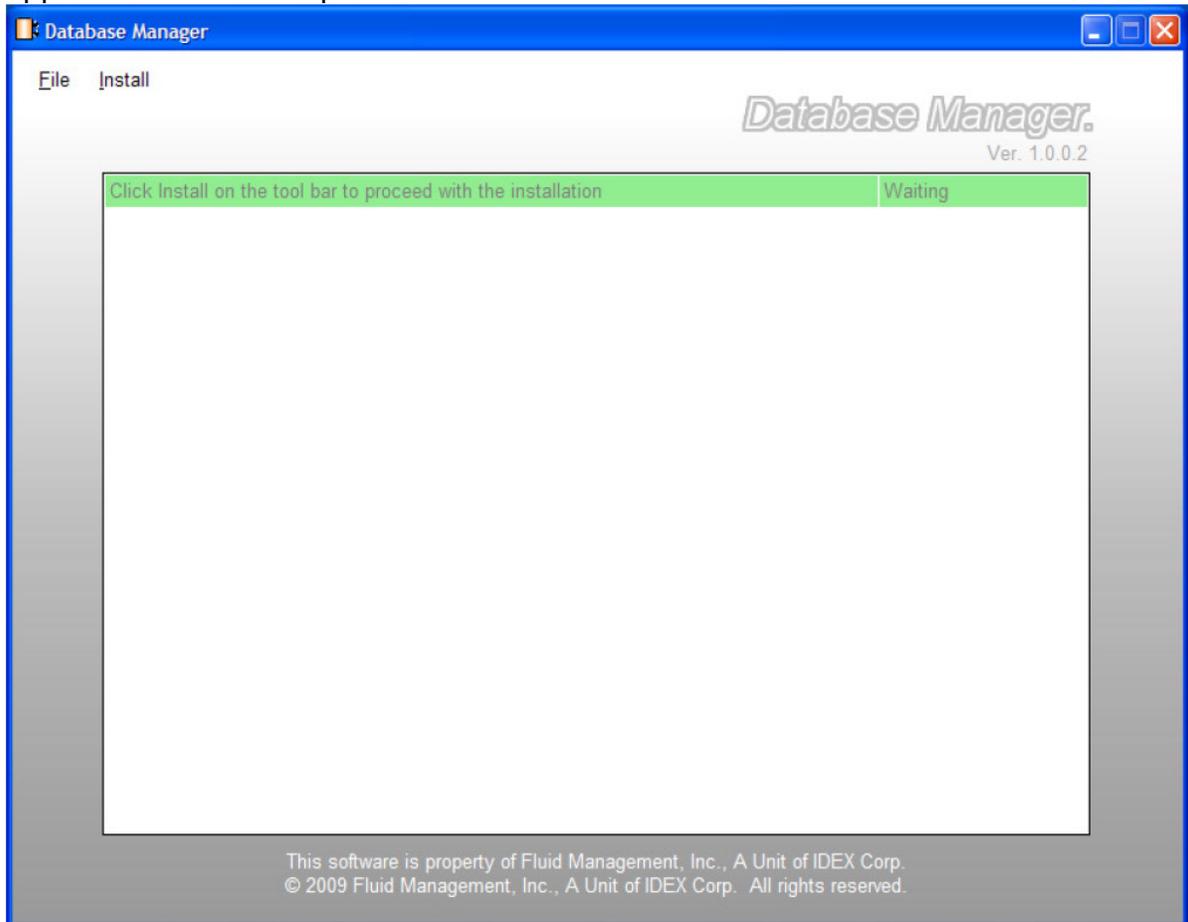
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### RUNNING IN INSTALL/DISPLAY-ONLY MODE – STANDARD MODE FOR SWPART INSTALLATION

Running in install/display-only mode is strictly for installing databases. This is mainly for customers that distribute installations on CD and want everything that is included on the CD loaded onto the PC. Typically, the CD will contain the following items:

- Autorun.inf
- Database Manager.exe
- FM\_DBUpdate.dll (for Database Manager v1.0.0.17 and later)
- nsoftware.IPWorksZip.dll (for Database Manager v1.0.0.16 and earlier)
- Ionic.Zip.dll (for Database Manager v1.0.0.17 and later)
- Configuration.xml
- Database.zip

The autorun.inf file will contain the command line switch '/I' to indicate that it is to run in install/display-only mode. The screen below will appear and then wait for the user to click on Install to proceed with the installation. Upon clicking, the application will list the previous and current actions taken.





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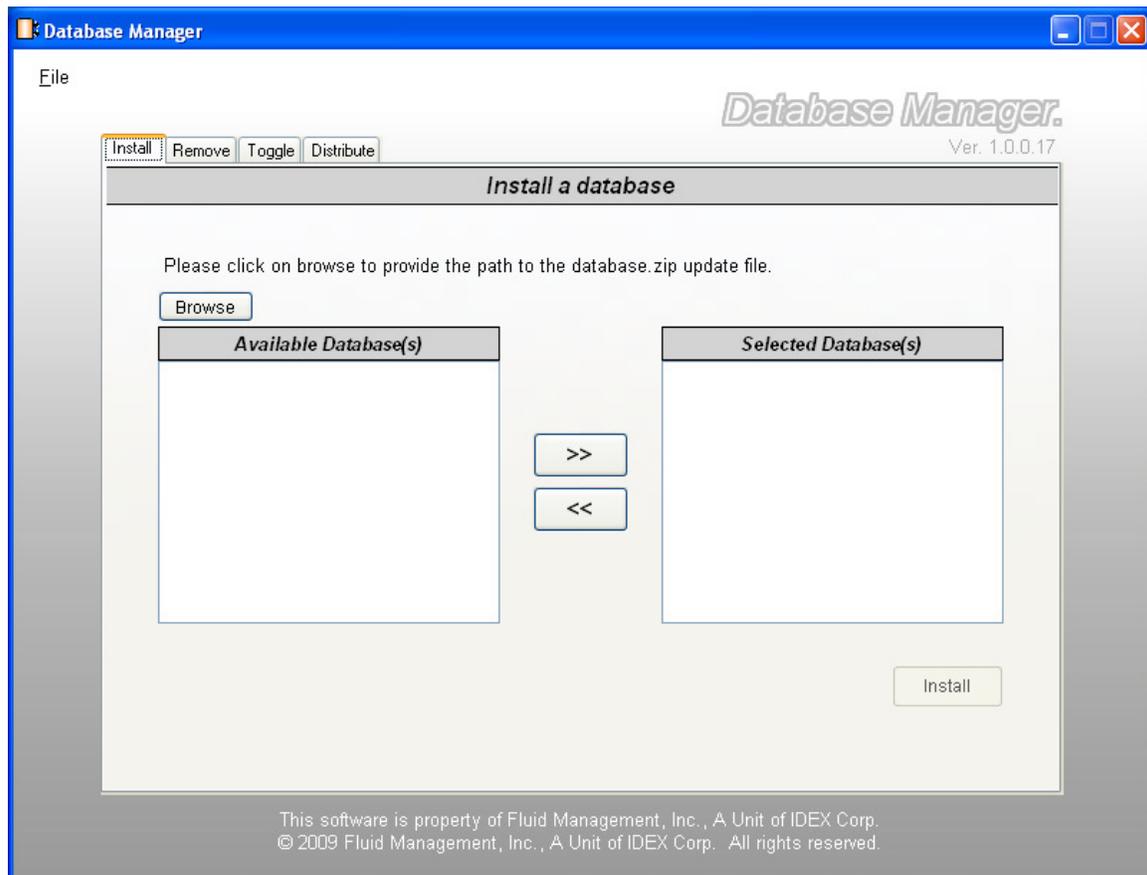
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### RUNNING IN SELECTION MODE

The selection mode is entered simply by starting the Database Manager without any command line switches or by double clicking it in the database folder.

#### Install tab

When started, the install screen below will appear and allow the user to manually locate the database.zip file. The list on the left will contain all of the database brands in the database.zip file. The user can then select the brands to install and clicks the right arrow button to move them to the list on the right. The user then clicks the Install button. Upon clicking, the application will list the previous and current actions taken, and enable the Done button.



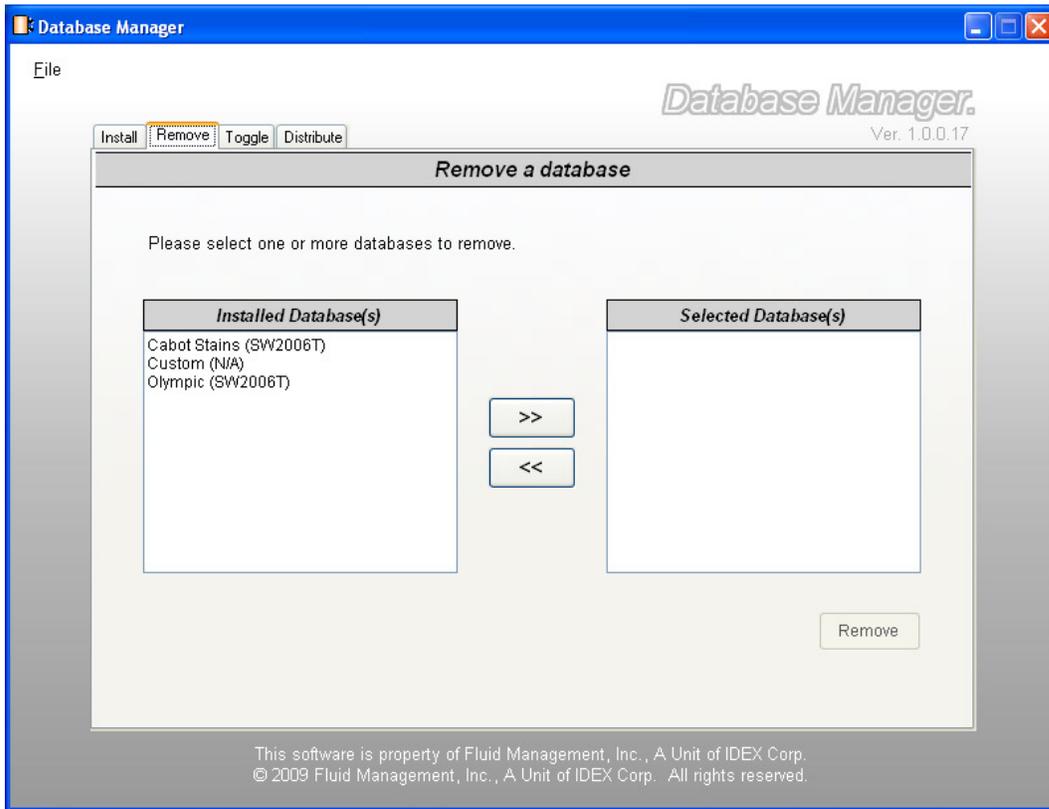


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### Remove tab.

The user can uninstall and delete any loaded database brand on the remove screen below. The list on the left contains all of the installed database brands, including disabled brands. The user selects the brands to be deleted and clicks the right arrow button to move them to the list on the right. The user then clicks the Remove button to uninstall them. Upon clicking, the application will list the previous and current actions taken, and enable the Done button. The database files will be permanently deleted.



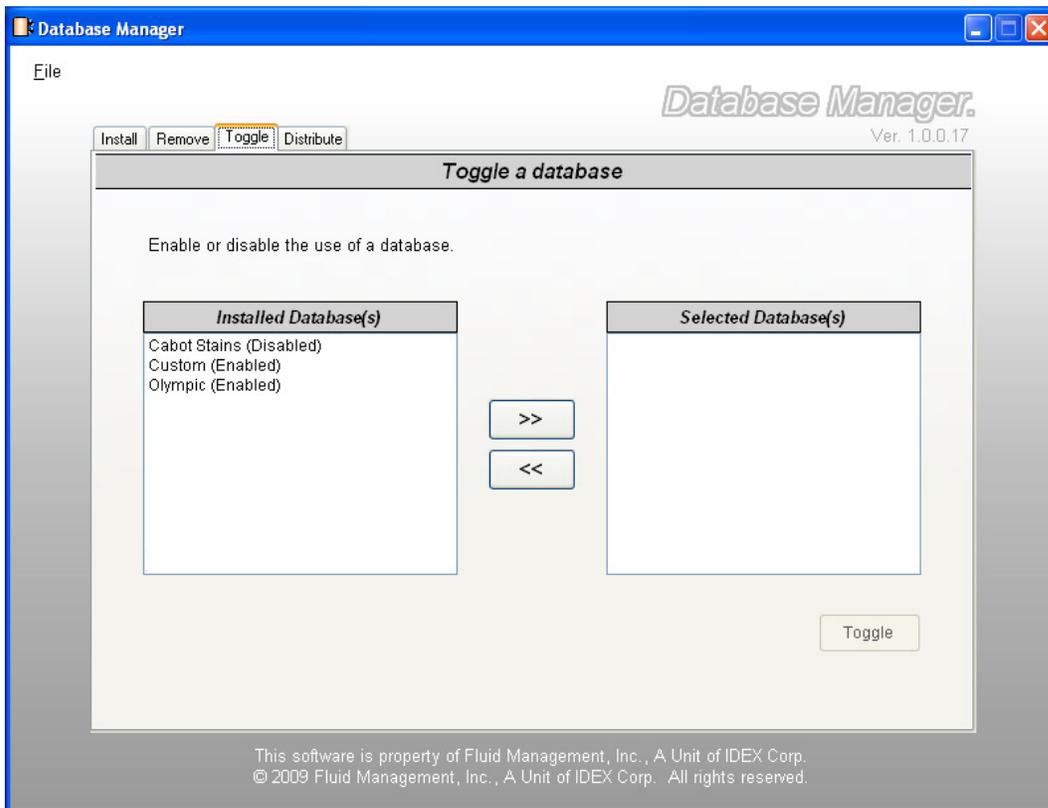


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## Toggle tab

The user can enable or disable the installed database brands on the toggle screen below. Disabled brands will not appear on the ColorPro dispense screen, but remain installed. The left list contains all of the installed database brands with their enabled or disabled statuses. The user selects the databases to enable and/or disable and clicks the right arrow button to move them to the list on the right. The user then clicks the Toggle button. Upon clicking, the application will list the previous and current actions taken, and enable the Done button. Enabled brands will be disabled, and disabled brands will be enabled.



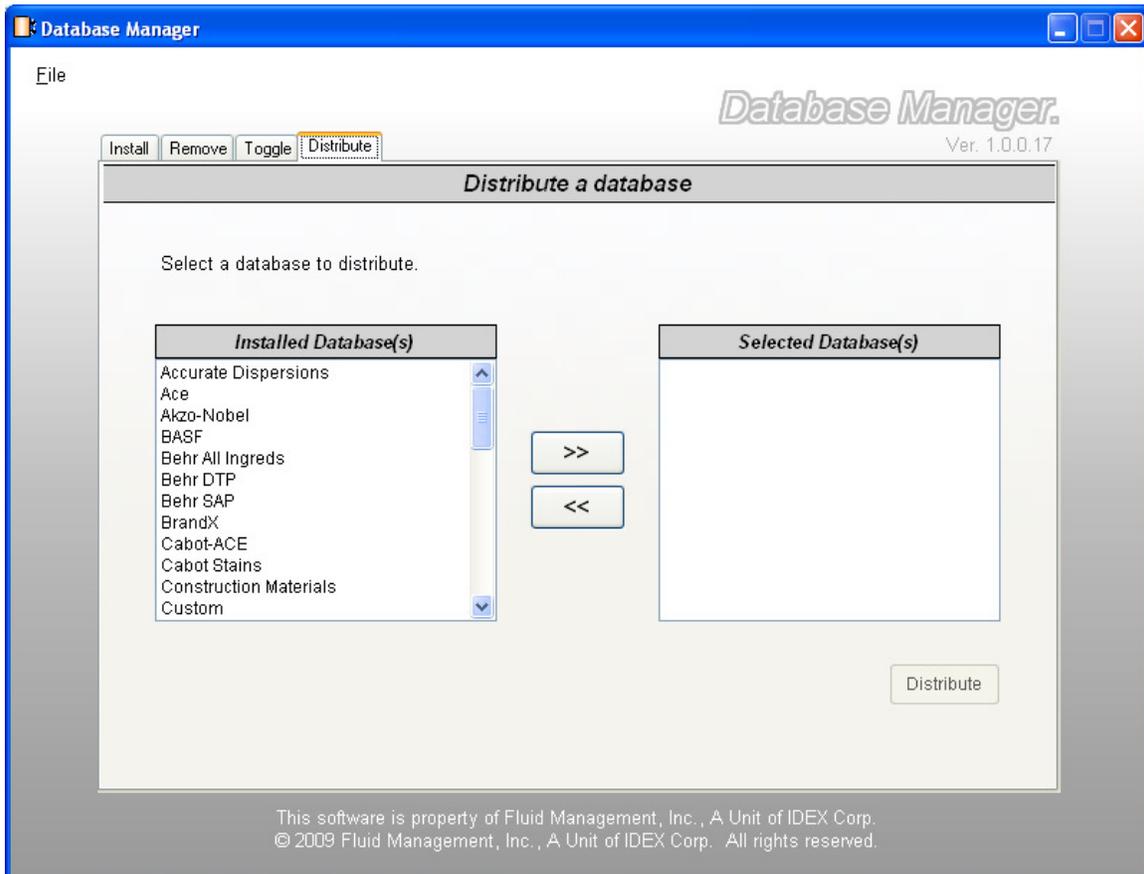


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### Distribute tab.

The user can create database.zip files from the installed database brands on the distribute screen below. The list on the left contains all of the installed brands, including disabled brands. The user selects brands to be included in the database.zip file and clicks the right arrow button to move them to the list on the right. The user then clicks the Distribute button. Upon clicking, the application will prompt for a folder for the database.zip file, list the previous and current actions taken, and enable the Done button. A new database.zip file with the selected brands will be saved in the selected folder.



### DATABASE STRUCTURE UPDATES

From time to time product improvements or added features may result in changes to the database structure. These structural updates are included with each revision of the library FM\_DBUpdate.dll used by Database Manager and will occur automatically to all installed databases, regardless of the contents of Database.zip.

Structural updates may be installed manually by simply starting Database Manager without any command line switches or double clicking it in the database folder, and then closing it from the File menu.



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Starting with ColorPro 4.1, database updates are automatically installed whenever ColorPro starts.

END OF PROCEDURES

### Appendix A. UNDERSTANDING THE CONFIGURATION.XML FILE

Below are the contents within the configuration.xml file. Please note that this file must reside in the same directory as the Database Manager.exe program. The program will read in the xml file and use its contents to establish the installation directories and the connection string for SQL server.

XML Contents:

```
<?xml version="1.0"?>
<Default>
  <DatabaseDirectory>C:\Program Files\Fluid
    Management\ColorPro\Databases</DatabaseDirectory>
  <TempDirectory>C:\Program Files\ Fluid
    Management\ColorPro\Databases\Tempdir001</TempDirectory>
  <ConnString>server=(local)\SQLEXPRESS;database=master;Trusted_Con
    nection=Yes</ConnString>
</Default>
```

XML Contents Explanation:

DatabaseDirectory value - The path to where the database files will reside  
TempDirectory value – The temporary directory used by Database Manager to manage updates  
ConnString value – The connection string for the SQL Server



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### Appendix B. UNDERSTANDING THE DATABASE.ZIP ARCHIEVE

The database.zip archive holds all database information.

Within the database.zip archive is a file called FM\_Brands.xml.

#### XML Contents Explanation:

Brand - Contains the brand name that will get displayed on the screen.

Database\_Name – Contains the name of your physical database without the extension.

SortWeight - Indicates the order the brand name appears in a list of multiple brands, highest first.

Active - Indicates if this database is available for use.

CustomFormulas - Indicates if the brand allows custom formula saving. See special installation section for custom formula databases above.

This file can contain one or more FM\_Brand elements depending on how many databases you want to add or remove. In order for the install to work, you must name your Database\_Name value exactly the same as you named the database mdf file without the extension. So for example, if we wanted to load a database file called myDataBase and another database called myOtherDataBase we would structure the zip file as such:

#### Database.zip

- FM\_Brands.xml
- myDataBase.mdf
- myDatabase\_log.ldf
- myOtherDataBase.mdf
- myOtherDataBase\_log.ldf
- Custom.mdf – standard software parts always contain a custom database
- Custom\_Log.ldf

and have the FM\_Brands.xml file contain the following data:

```
<?xml version="1.0" standalone="yes"?>
<FM_BRANDS>
  <FM_BRAND>
    <Brand> Custom </Brand>
    <Database_Name>Custom</Database_Name>
    <SortWeight>1</SortWeight>
    <Active>True</Active>
    <CustomFormulas>True</CustomFormulas>
  </FM_BRAND>
  <FM_BRAND>
```



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```
<Brand> myBrandName </Brand>
<Database_Name> myDataBase</Database_Name>
<SortWeight>10</SortWeight>
<Active>True</Active>
<CustomFormulas>False</CustomFormulas>
</FM_BRAND>
<FM_BRAND>
  <Brand>myOtherBrandName</Brand>
  <Database_Name>myOtherDatabase</Database_Name>
  <SortWeight>900</SortWeight>
  <Active>True</Active>
  <CustomFormulas>False</CustomFormulas>
</FM_BRAND>
</FM_BRANDS>
```

### Appendix C: RUNNING IN SILENT MODE

There are a few command switches for silent mode:

- \S\I for installing all databases listed within the zip file's FM\_Brands.xml file.
- \S\U for uninstalling all databases listed within the zip file's FM\_Brands.xml file.
- \S\Q for reporting all the loaded databases.

Note: Since there is no display in silent mode an xml file called Report.xml will be generated and appended to after each action performed in silent mode. You can view the results of your action by opening the Report.xml at the application's path. The file will be deleted and restarted after 1M of data has been collected.

Note: When uninstalling all that is needed in the database.zip file is the FM\_Brands.xml file.