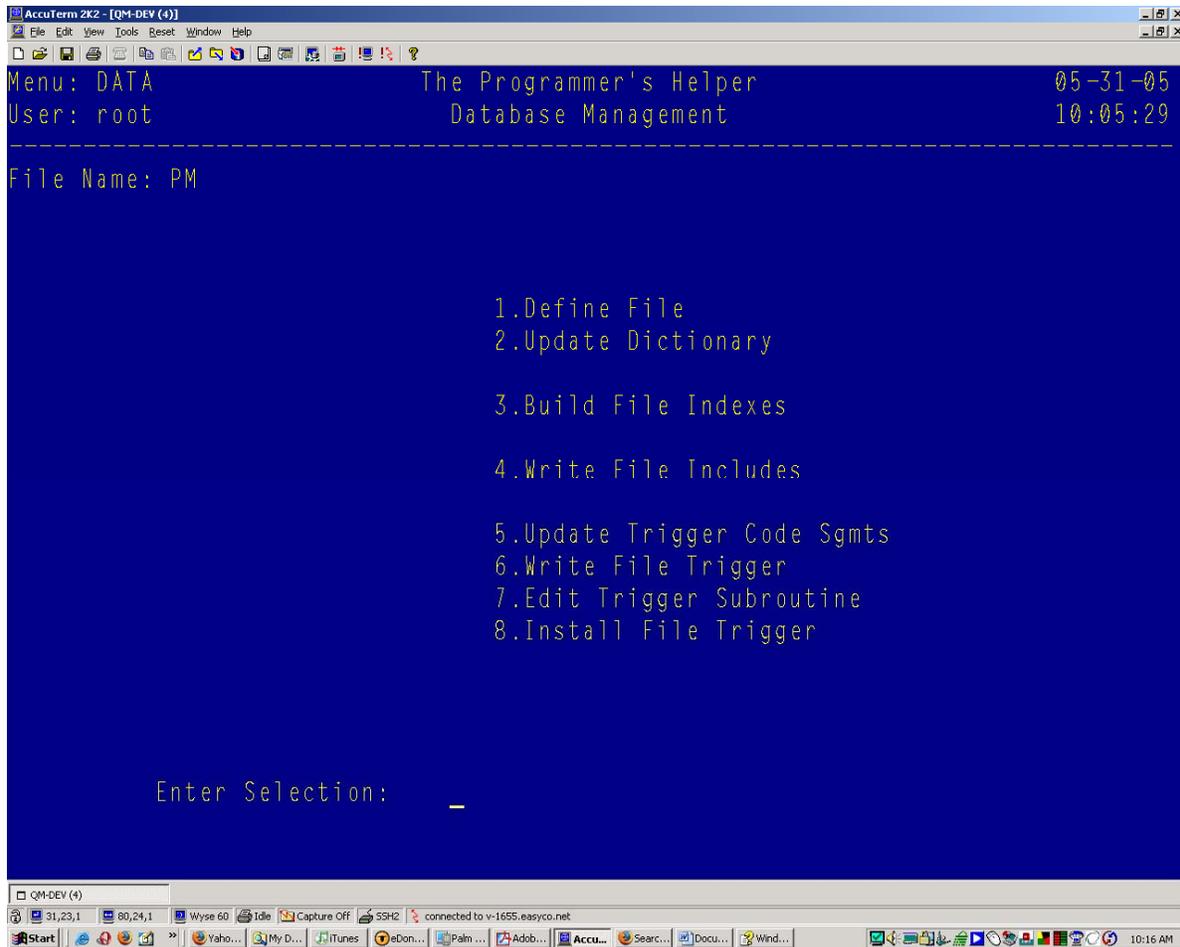


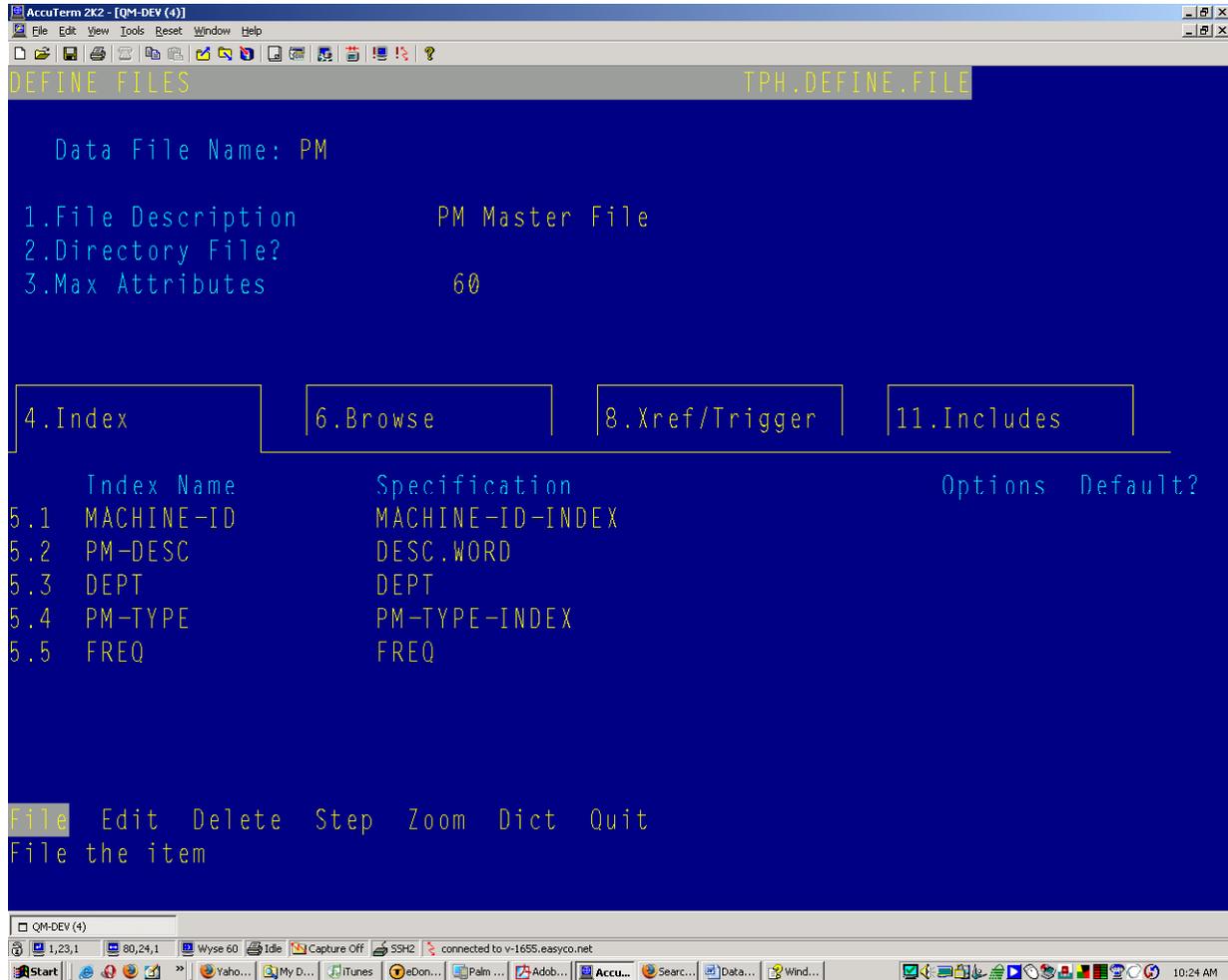
# Database Functions



The screenshot shows a terminal window titled "AccuTerm 2K2 - [QM-DEV (4)]". The window has a menu bar with "File", "Edit", "View", "Tools", "Reset", "Window", and "Help". The main display area has a blue background with yellow text. At the top, it shows "Menu: DATA", "User: root", "The Programmer's Helper", "Database Management", "05-31-05", and "10:05:29". A dashed line separates the header from the main content. Below the dashed line, it says "File Name: PM". A list of eight numbered options is displayed: 1. Define File, 2. Update Dictionary, 3. Build File Indexes, 4. Write File Includes, 5. Update Trigger Code Sgmts, 6. Write File Trigger, 7. Edit Trigger Subroutine, and 8. Install File Trigger. At the bottom, it says "Enter Selection: \_". The terminal window is running on a Windows XP desktop, with the taskbar showing various applications like Yahoo, My D..., iTunes, eDon..., Palm..., Adob..., Accu..., Search..., Docu..., and Wind... The system clock shows 10:16 AM.

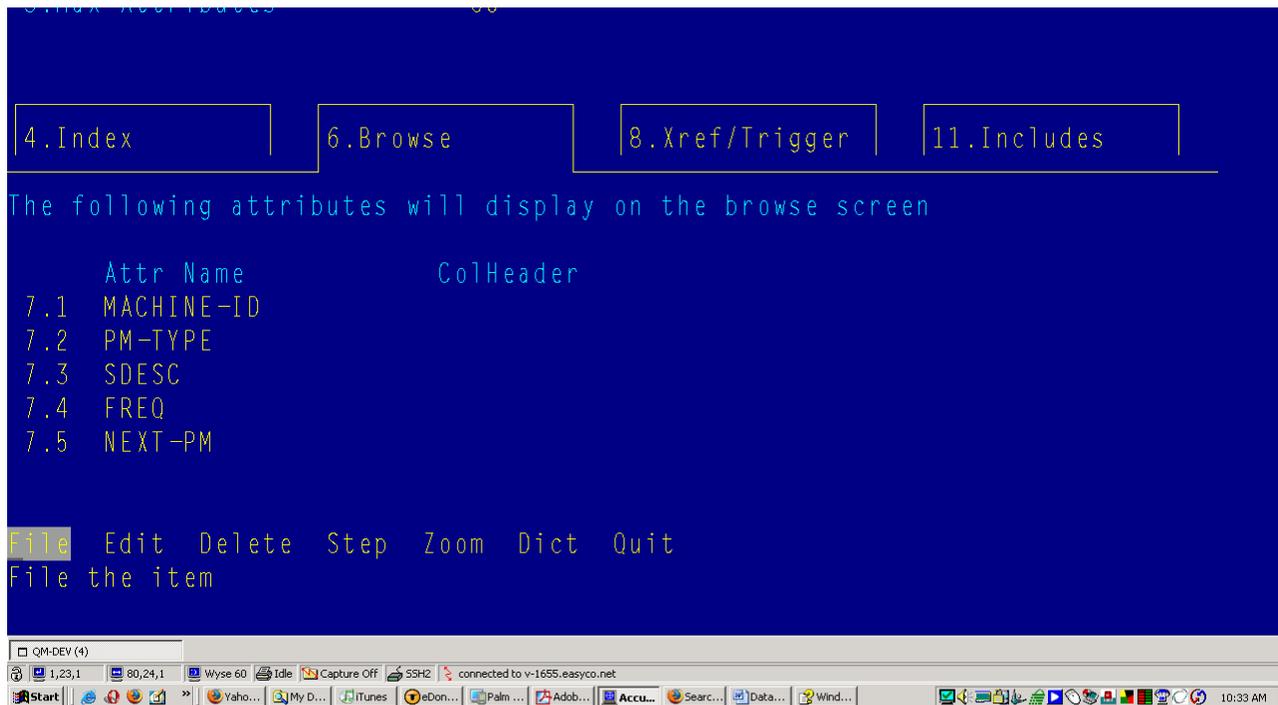
1. Define File. Information related to a specific file. Covered in more detail below.
2. Update Dictionary. Define and Update data dictionary items. Covered in more detail below.
3. Build File Indexes. If any index fields were defined in Step 1 this function will create the indexes. May require exclusive access to the file.
4. Write File Includes. This will create an item that equates each field name to its corresponding array element for use with MATREAD/MATWRITE statements.
5. Update Trigger Code Segments. If Trigger/Cross Reference fields were defined in Step 1 you can modify the code that will be written in the Step 6.
6. Write File Trigger. This will generate a trigger subroutine using the parameters defined in Step 1
7. Edit Trigger Subroutine. This lets you review or modify (not recommended) the generated subroutine.
8. Install File Trigger. This will install (activate) the trigger subroutine. It requires exclusive access to the file and so is best run immediately after an stop and restart of QM.

## Define File



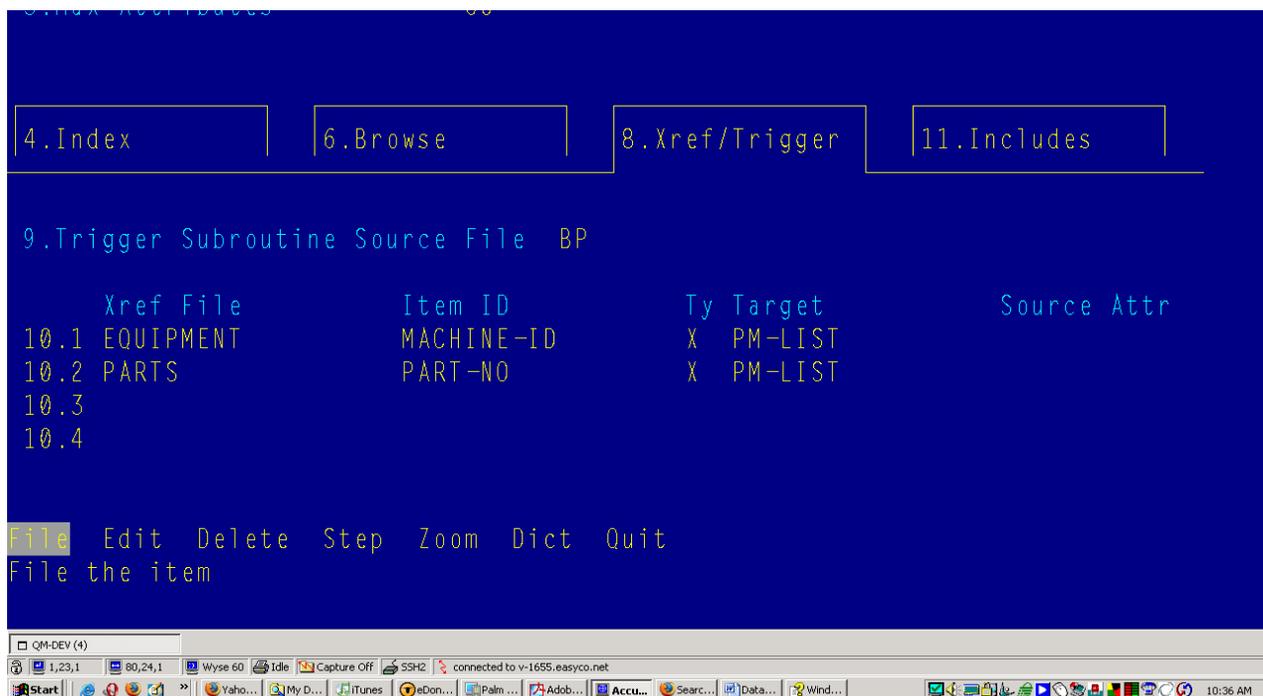
All information that is specific to a particular file is stored in TPH-FILES and updated with this program. If this is a new file it will be automatically created. Detail on each field:

1. **File Description.** A brief (35 character) description of the file and its use
2. **Directory File?** Some files may be just directories in the operating systems file system. Most data files will have this option set to N
3. **Max Attributes.** This is the size used to dimension the read/write array.
4. Index Tab
5. Index Definitions. This defines which fields are indexed.
  - a. **Index Name.** This is a short description of the index. This is what is presented as a choice to the user.
  - b. **Specification.** This is the name of a dictionary item that defines the index value. May be a calculated field (“I Type”)
  - c. **Options.** Optional parameters for this index (for future use)
  - d. **Default.** A “Y” means this index will be used on searches if no index specified.



## 6. Browse Tab

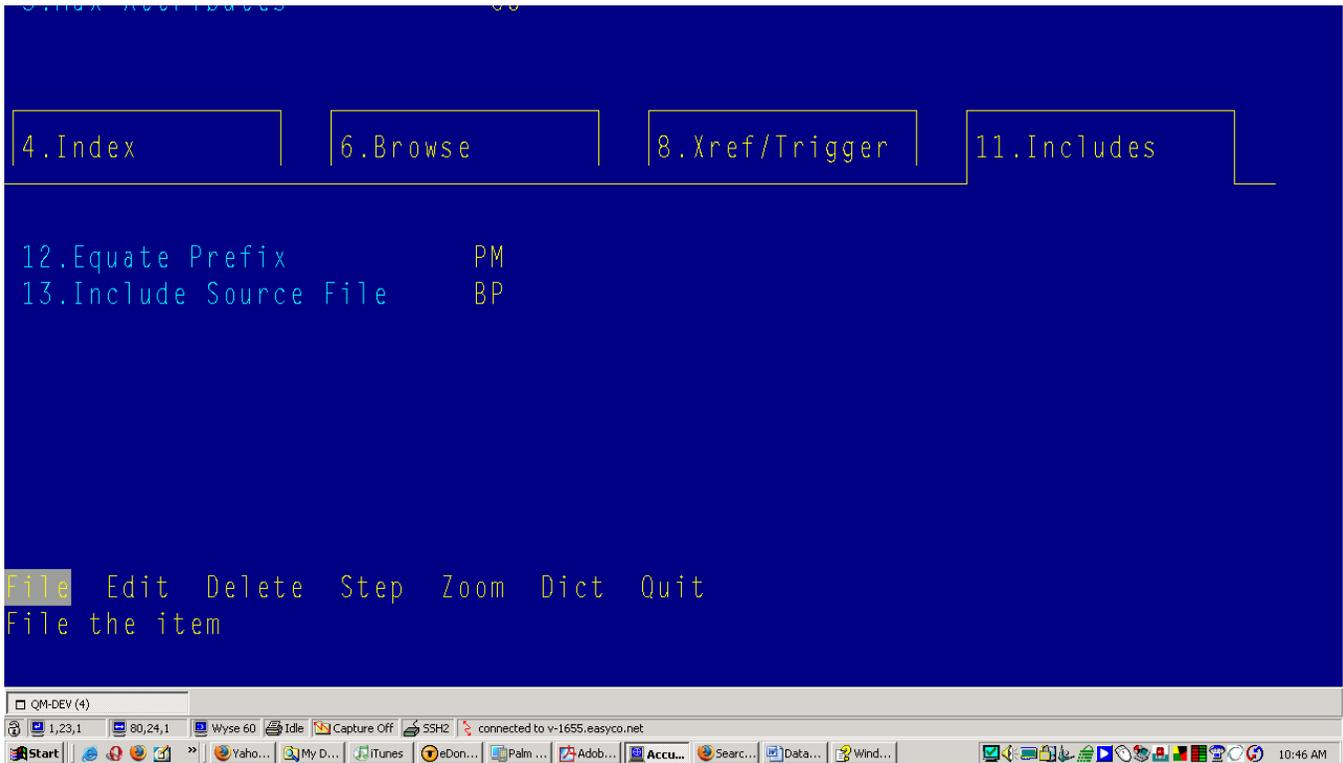
7. Browse Specifications. This defines which file fields will be displayed on any search
  - a. **Attr Name.** A dictionary name to be display. Any conversions will be applied
  - b. **ColHeader.** The column header define in the dictionary may be overridden here.



## 8. Xref Trigger tab

9. **Trigger Subroutine Source File.** The file in which the generated subroutine will be stored.
10. **Trigger Definitions.** The files to be updated are defined here.
  - a. **Xref File.** The file that will be updated whenever the main file is updated.
  - b. **Item ID.** A dictionary name in the main file that will be used to generate the Item ID of the Xref file.
  - c. **Ty.** Trigger Type. Some values:

- i. **X.** Cross Reference (i.e. a multivalued list of main file Item IDs will be stored in the **Xref File** defined by the dictionary item **Target**.)
- ii. **A.** Add. The value of main file **Source Attr** will be added to the **Target** in the **Xref file**.
- iii. **S.** Subtract. Same as above only the value will be subtracted.
- iv. **I.** Increment. Same as A only a value of 1 will be used
- v. **D.** Decrement. Same as S only a value of 1 will be used
- d. **Target.** A Dictionary name that defines which attribute in the **Xref File** is to be updated.
- e. **Source Attr.** A Dictionary name that defines which attribute is used to update the **Target**



### 11. Includes Tab

12. **Equate Prefix.** A unique short prefix to be prepended to attribute name to the equate to insure a unique name (for example, there may be a CUST.NO in many files.)

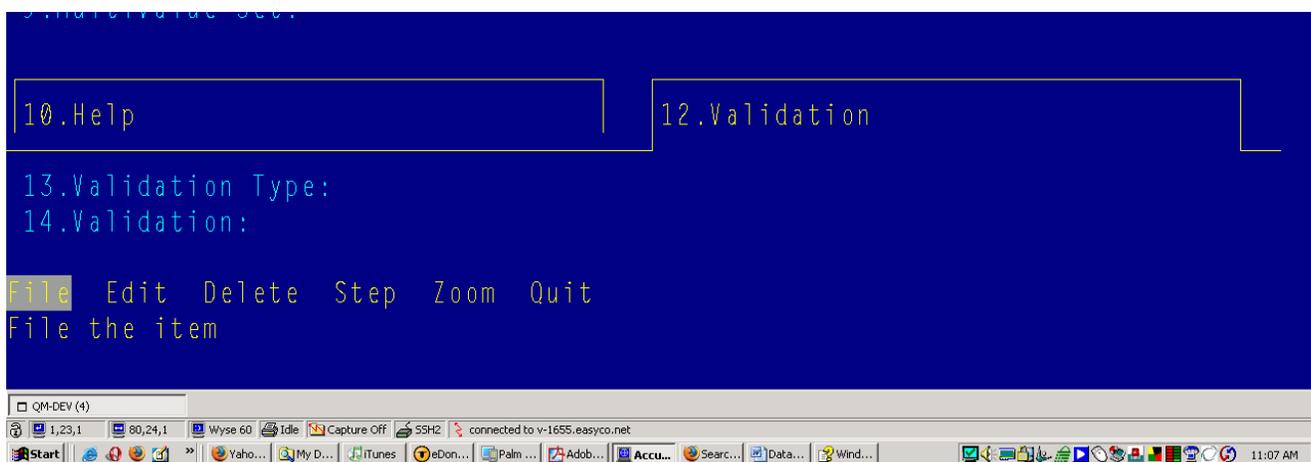
13. **Include Source File.** The file in which the Include item will be written.

## Define Dictionary

When invoked, you will first see a list of dictionary items. You may choose a number to update or choose **Add** to create a new dictionary item. You will then see the dictionary maintenance screen:



1. **Physical Field.** A “Y” means this field represents an actual field in the file (a “D Type” in QM parlance ). An “N” means a calculated field (an “I Type” in QM parlance)
2. **Primary Definition.** A “Y” means this dictionary item will be used when building equates. There can be only one Primary Definition for any one physical field.
3. **Location.** Only for Physical Fields. The attribute number of this field
4. **Formula.** Only for calculated fields. The formula used to calculate the field.
5. **Column Heading.** Update to three lines of text to be used as a column heading.
6. **Conversion.** A conversion code to be applied, eg. “MD2”, “D2/”, etc.
7. **Justification.** Left (L) or Right (R) justification of the data.
8. **Maximum Length.** The number of spaces allocated on reports or the maximum number allowed on data entry.
9. **MultiValue Set.** If this field is part of a multivalue set, enter a short code word that ties together all multivalued attributes in the set.
10. **Help Message Tab.**
11. **Help Message.** Enter the text to be used as a help message or tool tip (GUI)



12. **Validation Tab.** Here you can define default validation rules.
13. **Validation Type.** A single character code that defines the type of validation to be performed. See the document on Data Entry programs for specific values.
14. **Validation.** Text defining the specific validation to perform. Its value depends on what is selected for **Validation Type**. See document on Data Entry programs for examples.