



Whitemarsh  
Information Systems Corporation

# Whitemarsh Metabase Mission Organization Function Position Users Guide

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## **1 Introduction**

The purpose of the database application, Mission Organization Function Person Role (MOFPA) is to provide a database wherein data concerning the highest levels of missions, organizations, persons and their management levels, and functions within the enterprise can be stored and then employed to categorize and identify the proper use of information technology needs and assets. Enterprise, as used within the Whitemarsh context, is a relative term. It may be an entire corporation, or a division or business within a large corporation. It may be an entire government agency, or a department within a government agency. It mainly refers to the highest level within the organization that is subject to analysis.

### **Presumed Knowledge**

This user guide, and all the other metabase user guides presume that the reader has read and is completely familiar with the following documents: Metabase Common Processes, and Metabase Bill of Materials and Single File Recursion (BOM/SFR Guide). These two documents serve as metabase teaching guides for processes that commonly occur throughout the metabase system.

F7 invokes automatic spell checking on all text fields like names and descriptions.

### **Metabase Example**

The metabase example, Movies, is a complete example of a business which is available from the Whitemarsh website. The Movies Rental Corporation was modeled after the largest movies rental corporation in the United States. As such, the example has national, regional, and retail outlets. There are two data models, one for an original data capture, store based system, and another which is a data warehouse for rented movies.

## **2 Software Installation**

Metabase installation is explained in the Metabase Administrators Guide.

## **3 Database Design**

The database consists of 9 different tables in this database application. The tables are:

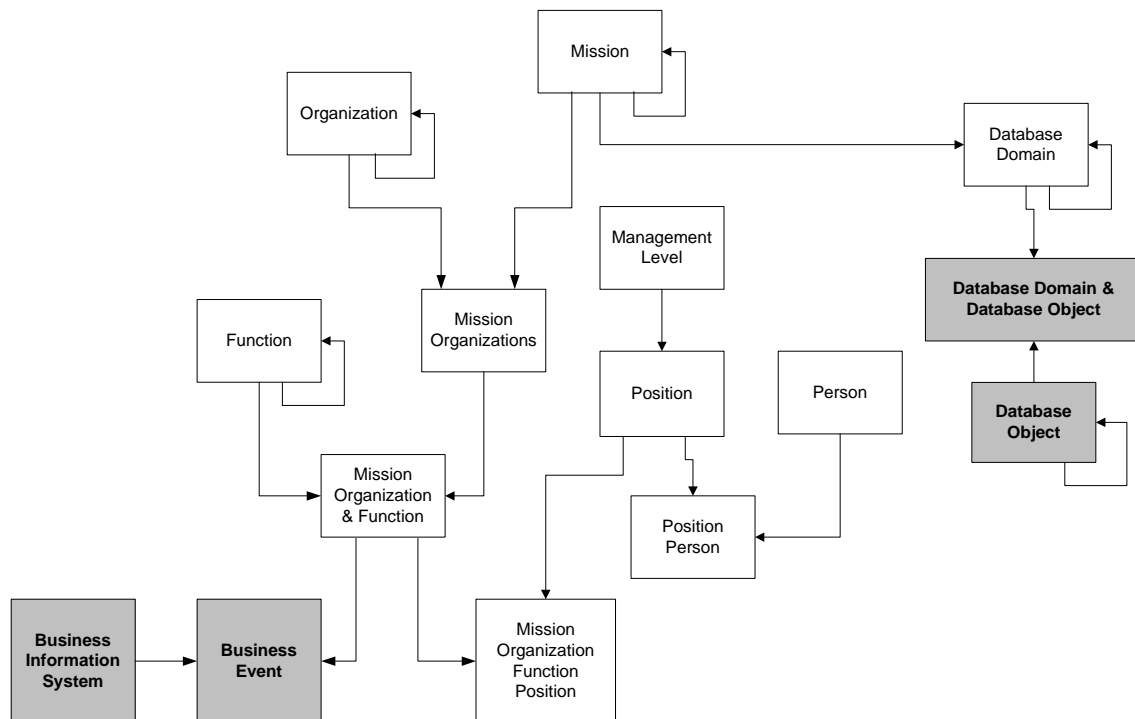
- Database Domain
- Function
- Management Level
- Mission



- Mission Organization
- Mission Organization Function
- Mission Organization Function Person Role
- Organization
- Person

Figure 1 presents the overall database schematic. The “greyed” tables are read only as they are updated in other metabase modules.

- A Database domain is a noun-intensive description of the data required to satisfy the requirements of a mission leaf at the leaf’s most detailed level. A database domain may be hierarchically composed, and at the lowest level of the database domains a mini-entity-relationship diagram should be created.



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8/23/2005

**Figure 1.** Mission, Organization, Function and Position meta model.



- A Function within the context of the Knowledge Worker Framework and the Whitemarsh methodology is a set of human activities performed by one or more positions by an organization in support of a mission..
- A Management Level is a classification a group of positions.
- A Mission is an idealized textual representation of a desired outcome of an enterprise. Missions are independent of organization and function. Missions can be hierarchically organized. Missions form the basis for all functions, organizations, data and business information systems within the enterprise.
- A Mission-Organization is the association of an organization with a mission. There can be multiple organizations associated with a mission and an organization can be associated with multiple missions. The description contained within the Mission-Organization may be more refined than the description contained in either the mission or the organization.
- A Mission-Organization-Function is the association of a mission-organization with a function. A mission-organization can be associated with multiple functions and a function can be associated with multiple mission-organizations. One or more mission-organization-functions may be associated with a business information system. When they are, business events are created. This process is accomplished within the Business Information Systems module.
- A Mission Organization Function Position is the assignment of a position to a particular function within an organization as it accomplishes a mission. Once assigned, the role can be named and described.
- An Organization is a unit within an enterprise. It is hierarchically so any quantity of organizational levels can be represented.
- A Person is someone of interest to this metabase module.
- A Position is a recognized, staffed, and assigned collection of activities performed by a person in support of one or more functions within an organization in support of a mission.
- A Position-Person is the assignment of one or more persons to a position.

The design permits the creation of one or more missions, organizations, functions and persons. Missions and organizations are related through the intersection table, mission-organization. This permits one or more missions to be performed within one or more organizations. Database domains are described directly in terms of mission, and database objects are related to one or more database domains. Functions are related to the intersection table, mission-organization



through a many to many relationship. This permits the same set of functions to be performed by multiple organizations that are pursuing the same mission. The level of generality or specificity of the functions is fully allowed users. For example, the design permits a special set of functions performed by a single organization as it pursues a single motion through to a generalized set of functions to be performed by multiple organizations pursuing multiple missions. The style is fully under the control of the enterprise's analysts.

Persons, performing under the domain of certain management levels can be related to one or more mission organization functions. This permits a full range of roles, from very specific to very general. The intersection record, mission organization function person role permits naming and describing performed roles.

## **4 Reference Data Tables**

There is only one reference data table, management level. Because there is only ONE reference data table it is included in the Personnel's menu on the application. A suggested set of values employed in the demo data are:

<b>Table</b>	<b>Value set</b>
Management Level	Clerical Executive Officers Professional

The value sets for all these tables can be changed as needed or appropriate.

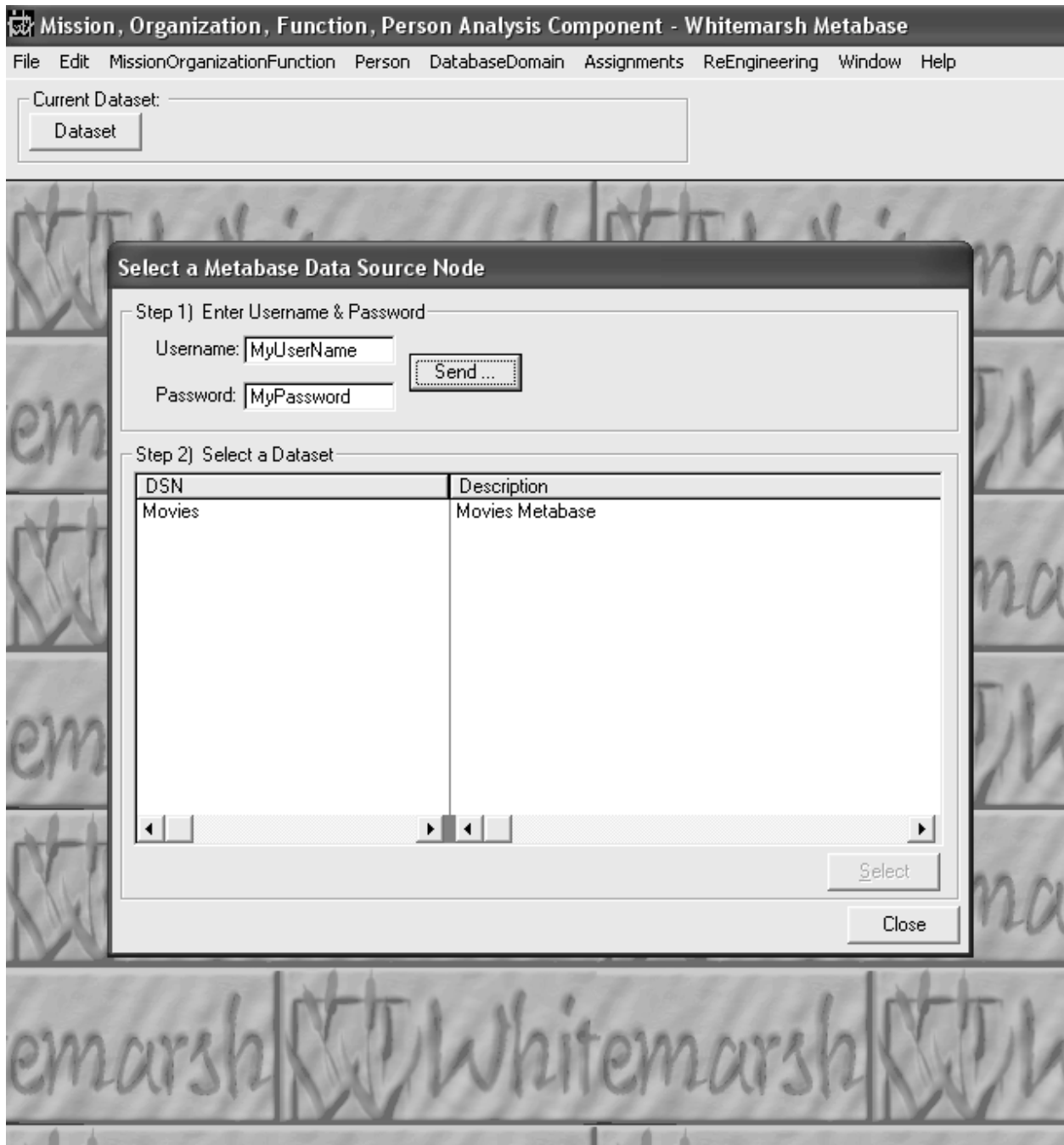
## **5 Operation**

Once the application is installed, it is ready to use. Just invoke the software from the metabase program. The application is a traditional windows application. Metabase reports are accomplished through any ODBC class report writer such as Crystal Reports.

### **5.1 Log In Process**

Figure 2 shows the log-in screen that appears immediately after the application is started. Entered is your user name and your password. These are created by the Metabase Administrator through the metabase administration module. Please contact your metabase administrator to set





**Figure 2.** Login process.

up your user name and password. Once a user name and password is established, all the user's information can be changed by the user through a restricted use version of the administrator software. Once the send button is pressed the specific metabase database instances that can be





accessed by the user is presented. The metabase is such that users are allowed to use specific metabase instances and specific metabase modules.

In this particular example, the user, once they sent their user name and password are shown the metabase database that they can access, that is, Movies. Highlight the choice and press the Select button. Once that is done then the metabase name, Movies, is shown as the data set that is being accessed.

## 6 Process Model

The MOFPA process model consists of two classes of processes:

- Reference Data
- Fact Data

The menu for this module is presented in the table that follows.

<ul style="list-style-type: none"><li>-- Mission Organization Function<ul style="list-style-type: none"><li>-- Missions</li><li>-- Organizations</li><li>-- Functions</li></ul></li><li>-- Position Person<ul style="list-style-type: none"><li>-- Positions</li><li>-- Persons</li><li>-- Management Levels</li></ul></li><li>-- Database Domain<ul style="list-style-type: none"><li>-- Database Domains</li></ul></li><li>-- Assignments<ul style="list-style-type: none"><li>-- Assign Missions to Organizations</li><li>-- Assign Mission Organizations to Functions</li><li>-- Assign Mission Organization Functions to Positions</li><li>-- Assign Position to Persons</li></ul></li><li>-- ReEngineering<ul style="list-style-type: none"><li>-- Reallocate Missions</li><li>-- Reallocate Organizations</li><li>-- Reallocate Functions</li><li>-- Reassign Position to Management Level</li></ul></li></ul>
<b>Menu for Mission, Organization Function Position Assignment</b>



## **6.1 Reference Data**

The MOFPA reference data, that is, management levels is accessible through the Personnel's menu. Adding or changing reference data consists of the following operations:

- INS key or button to insert a new reference data instance
- ENTER key or change button to modify an existing reference data instance
- DEL key or delete button to delete an existing reference data instance

If an attempt to perform a delete occurs but there are existing business information system records that are employing that instance, the delete operation is refused.

## **6.2 Fact Data**

The MOFPA process model consists of two classes of screens. The first class is the browse that lists all the current entries, and the second is the update form windows for inserting, deleting, or changing data. The fact data are:

- Mission
- Organization
- Function
- Person
- Management Level
- Database Domain

### **6.2.1 Missions**

Figure 2 shows a Mission browse window that is typical for these tables. The options for changing a mission are:

- INS key or Insert button to insert a new reference data instance
- ENTER key or Change button to modify an existing reference data instance
- DEL key or Delete button to delete an existing reference data instance



To create a new highest level mission, highlight the “Hierarchy” entry and press Insert. To create a subordinate entry, highlight the parent of the to-be-inserted entry and press Insert. Missions can only be deleted at the leafs. When the INS or ENTER key is pressed a data entry or modification screen pops up. Figure 4 shows a typical insert or change window. This figure permits the entry or change of an organization record.

After all the data is entered press OK to commit the data record to the database. The

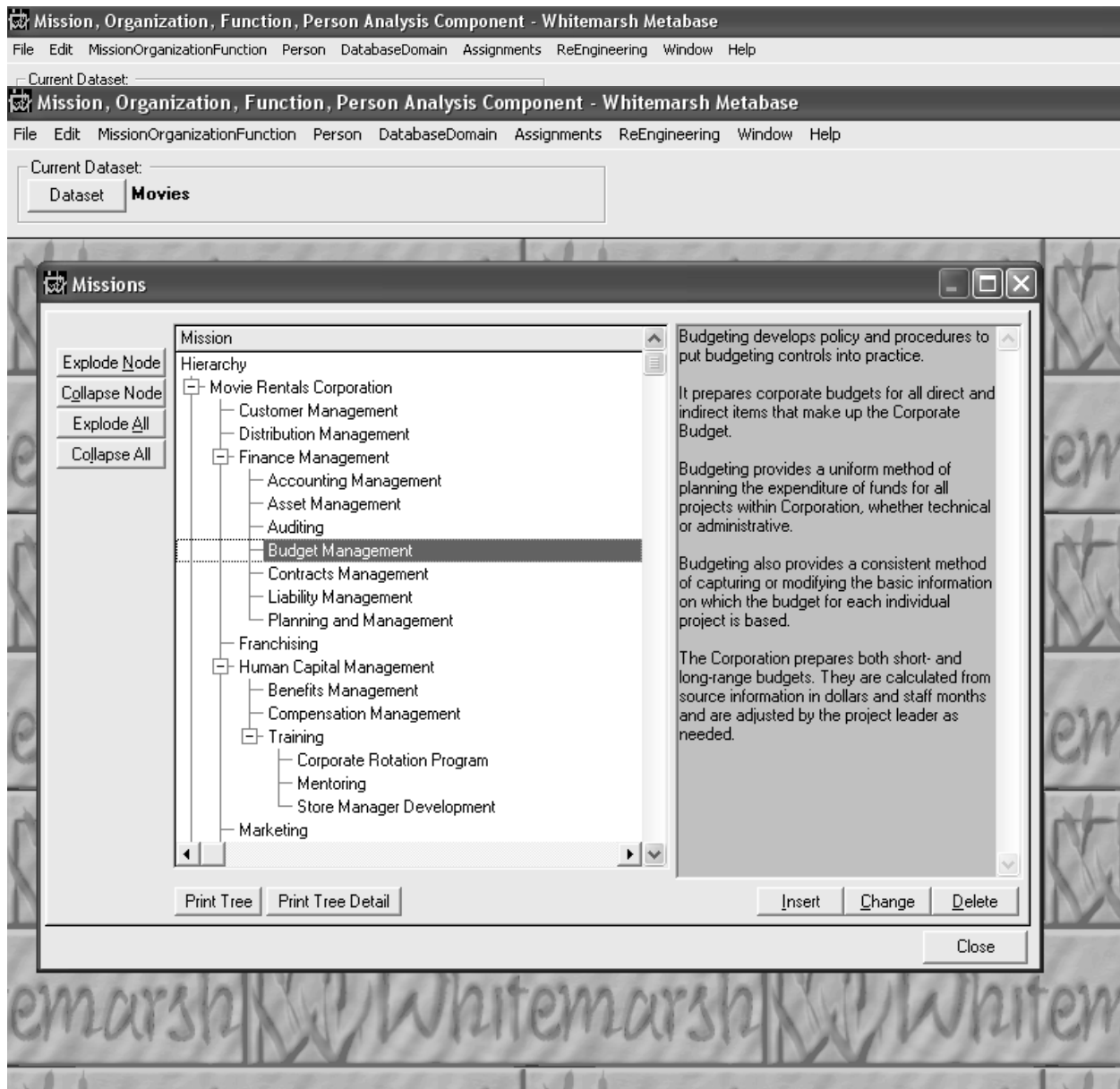


Figure 3. Mission update form.

Figure 4. List of missions.

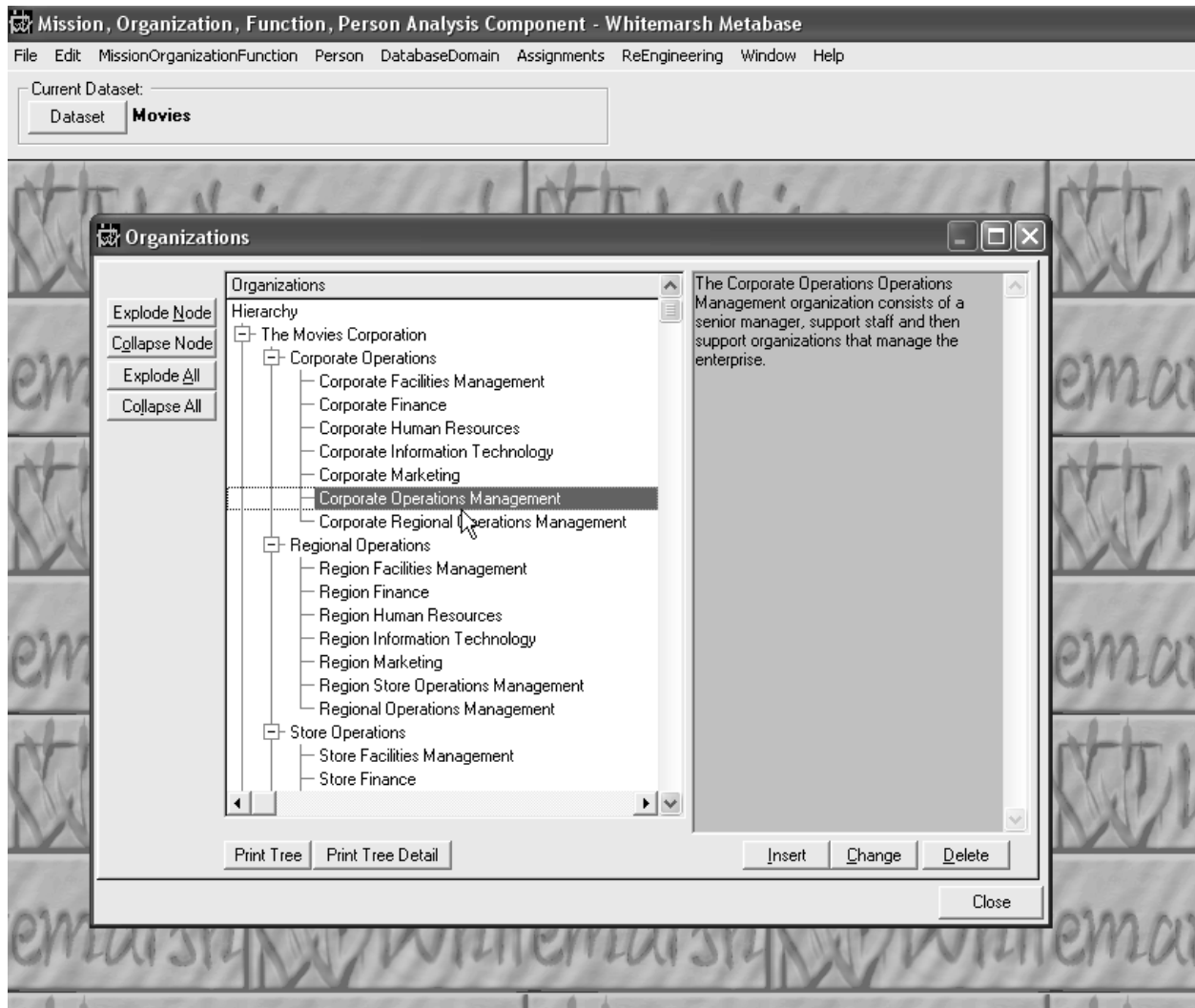


Cancel button can also be pressed to cancel the addition or change.

Missions represent the textual descriptions of the idealized enterprise. The test of their completeness is whether all the major aspects of the business can be readily seen in its list.

## 6.2.2 Organization

An organization is a bureaucratic unit of an enterprise. Figure 5 presents a list of organizations.

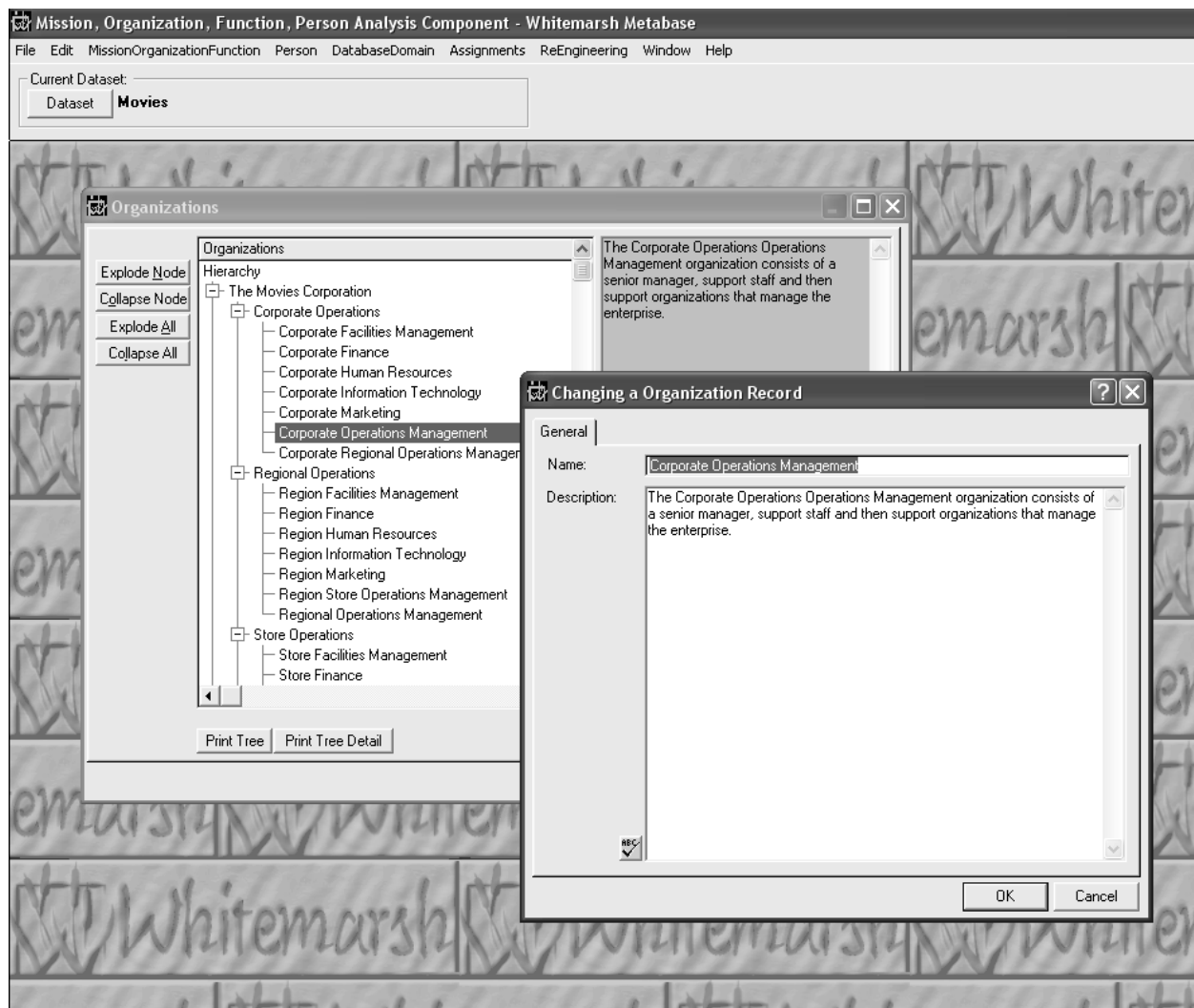


**Figure 5.** List of Organizations.

Organizations exist to accomplish the enterprise's missions. Each organization is described in terms of what organizations are, not what they do. What is not described is what the organization does. That is contained within Functions in support of Missions.



Figure 6 presents the update form for Organization. The description of the organization typically includes inferences as to the mission and/or functions accomplished.



**Figure 6.** Organization update screen.



### 6.2.3 Function

A function is a collection of human activities that are carried out by one or more organizations in support of a mission. Not all functions lead to automation assists. Figure 7 presents a list of functions. There may be multiple sets of functions that are essentially the same except for style. For example, manual ordering of a product versus an on-line ordering of a product, or two different organizations may have created differently styled functions to achieve the same result, such as hiring, expense reporting, budget management and the like.

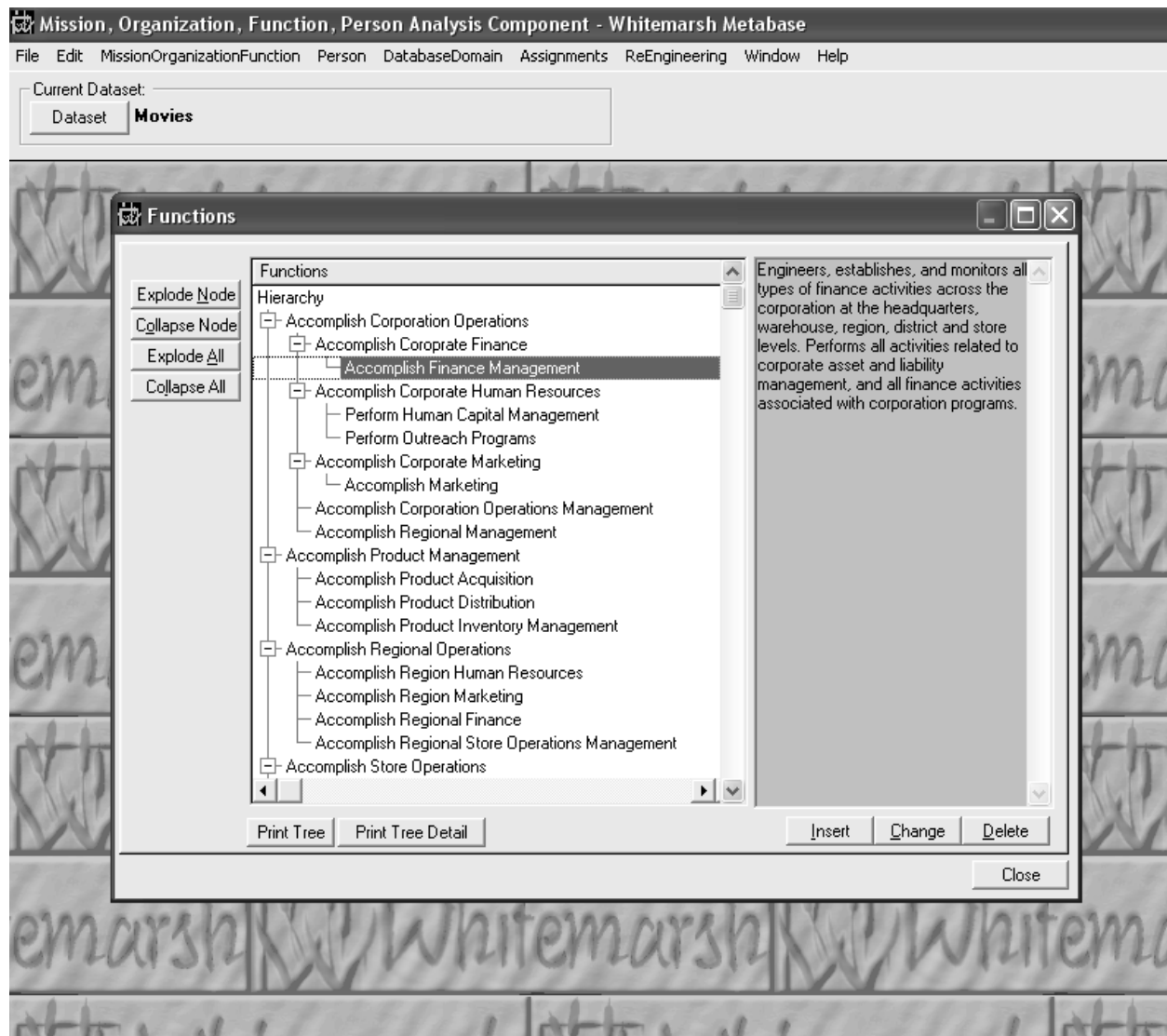
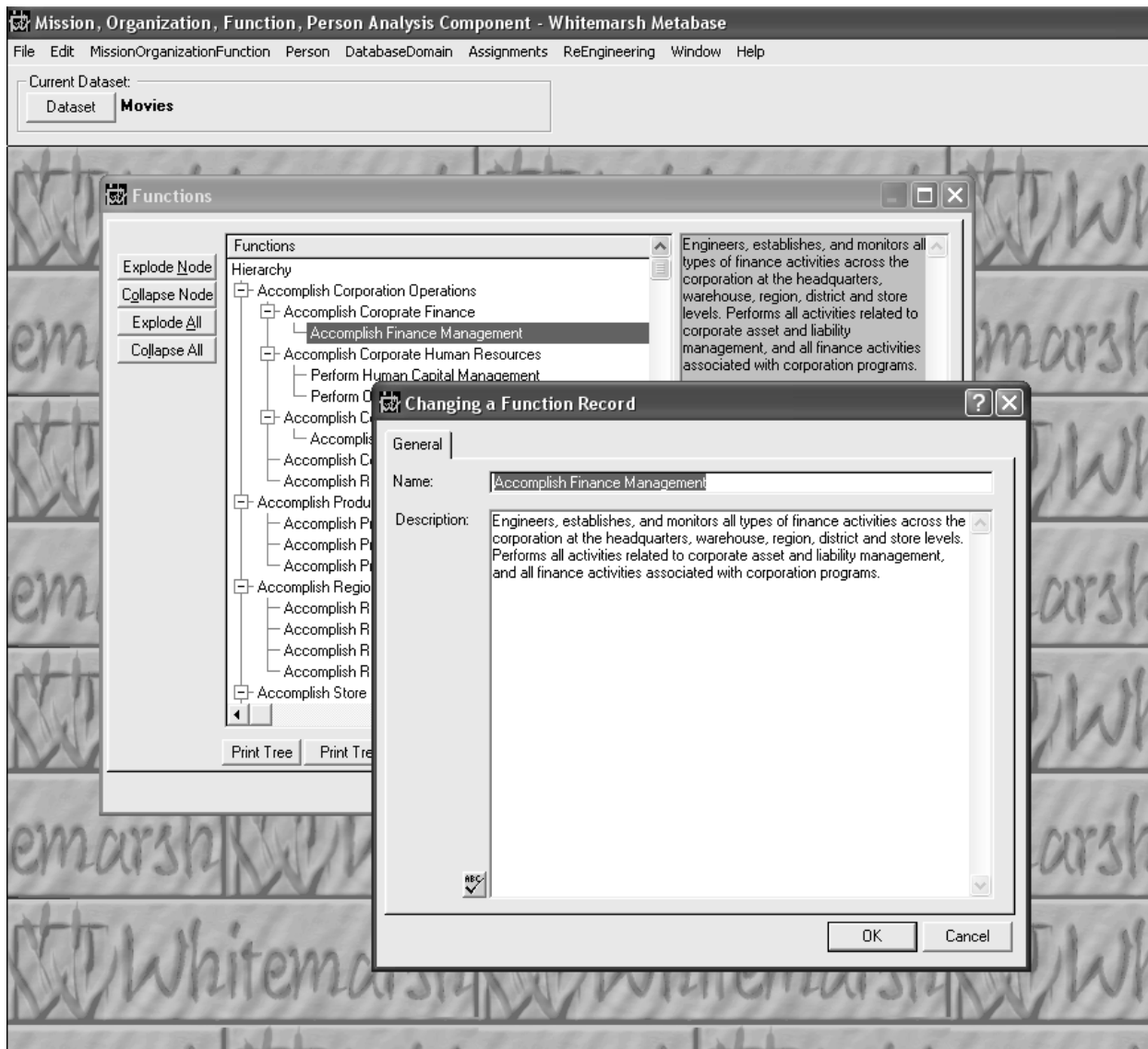


Figure 7. List of Functions.



Figure 8 presents the update screen for changing a function. The description of the function should be directed towards the actual physical accomplishment of the effort. If the description embraces multiple levels of activities then additional functional levels should be created and then the additional details of functional descriptions attached.



**Figure 8.** Function update screen.



## 6.2.4 Person

A person is someone of interest to the Movies Rental Corporation. The information collected is cursory at best as this information is not intended. The only contact information is the person's email address and telephone number. Figure 9 presents a listing of persons.

Figure 10 presents the update form for a person.

Mission, Organization, Function, Position Analysis Component - Whitemarsh Metabase

File Edit MissionOrganizationFunction PositionPerson DatabaseDomain Assignments ReEngineering Window Help

Current Dataset: Movies

Persons

Person Sequence: |

Last Name	First Name	M.I.
Alderwood	Dorothy	
Buckingham	Synthia	
Cash	John	
Johnson	Waylon	
Jones	Harry	
McClure	Ian	
Overbrook	Jennifer	
Smith	Mary	
UNKNOWN	UNKNOWN	U
Wildwood	John	

Dorothy Alderwood has been the Harrisburg, PA, regional manager for ten years. She progressed from store manager in Camp Hills, PA where she started as a customer service representative.

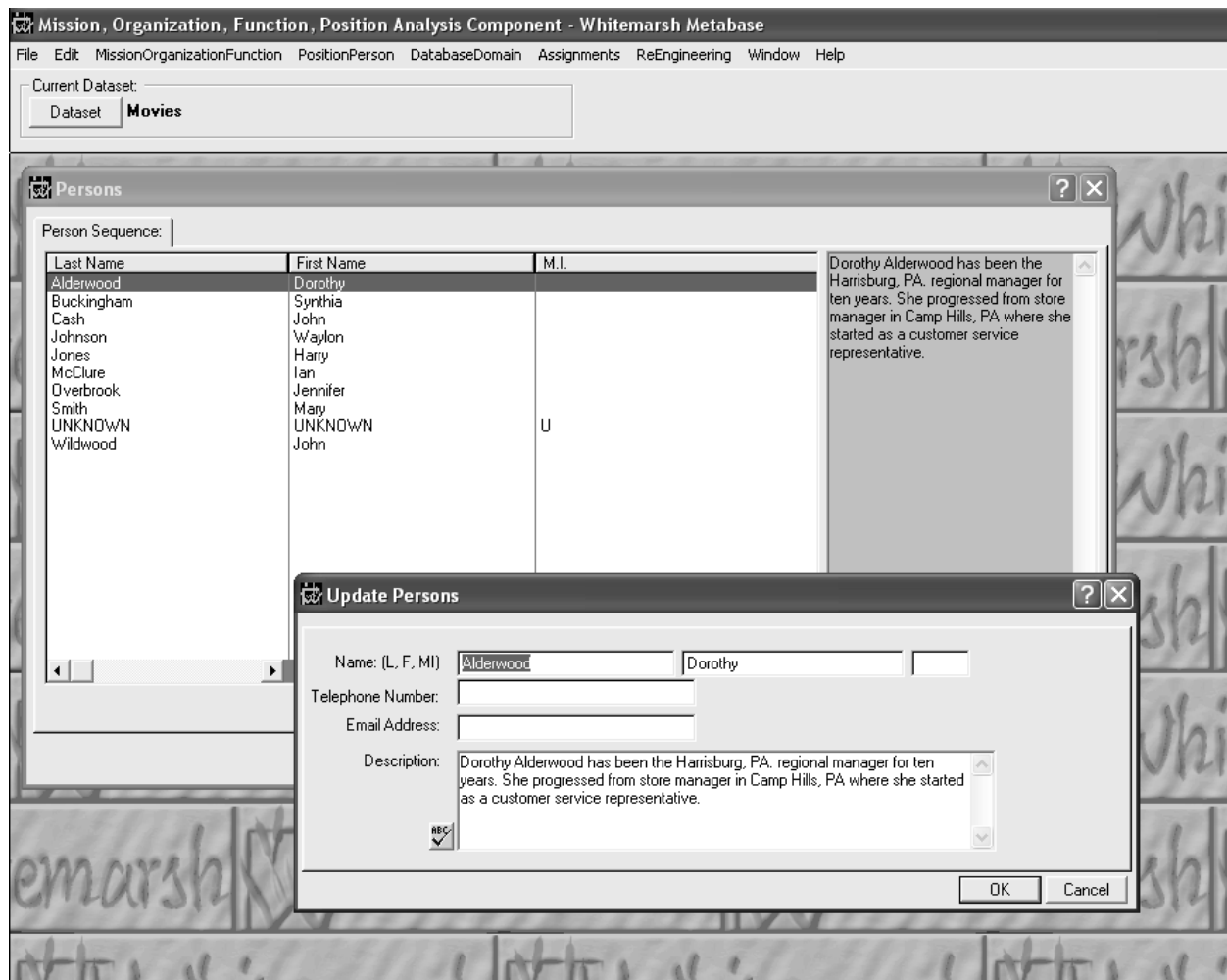
Insert Change Delete

Close Help

Figure 9. Person list.







**Figure 10.** Person update screen.



## 6.2.5 Management Level

A management level is a classification of the associated persons. Figure 11 lists the management levels for the Movie Rentals Corporation.

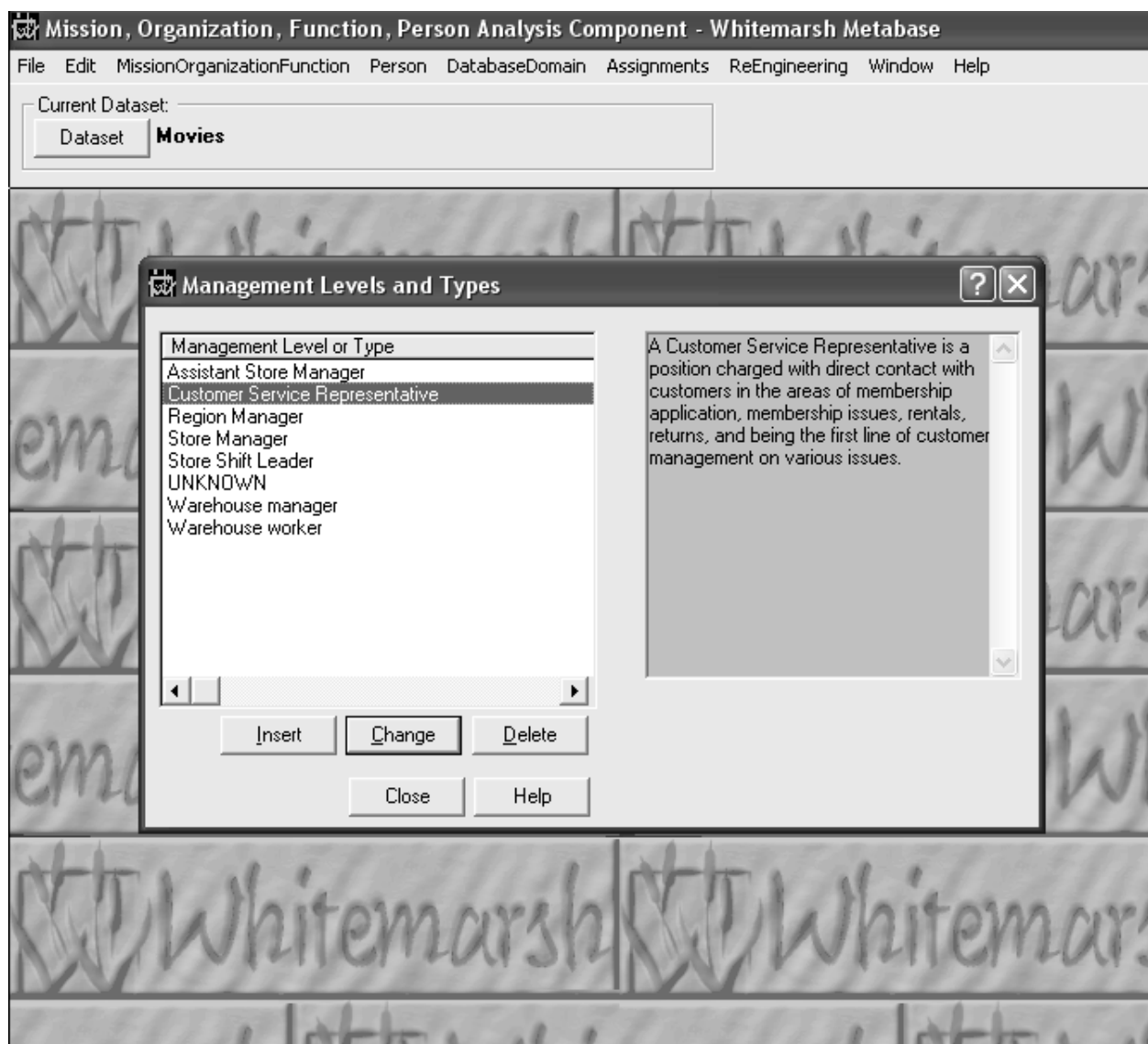


Figure 11. Management Levels.



Figure 11 presents the change form for Management level.

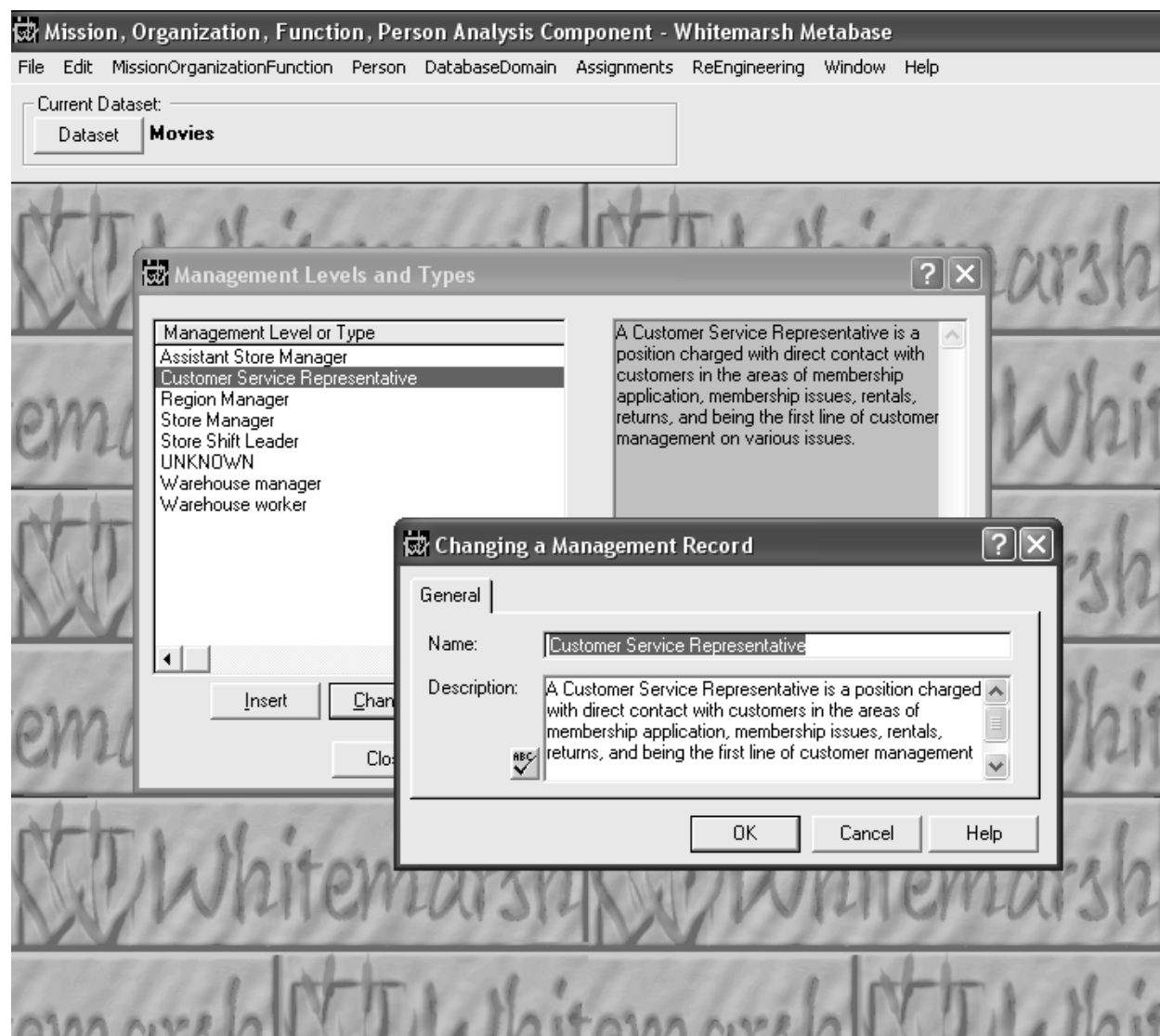
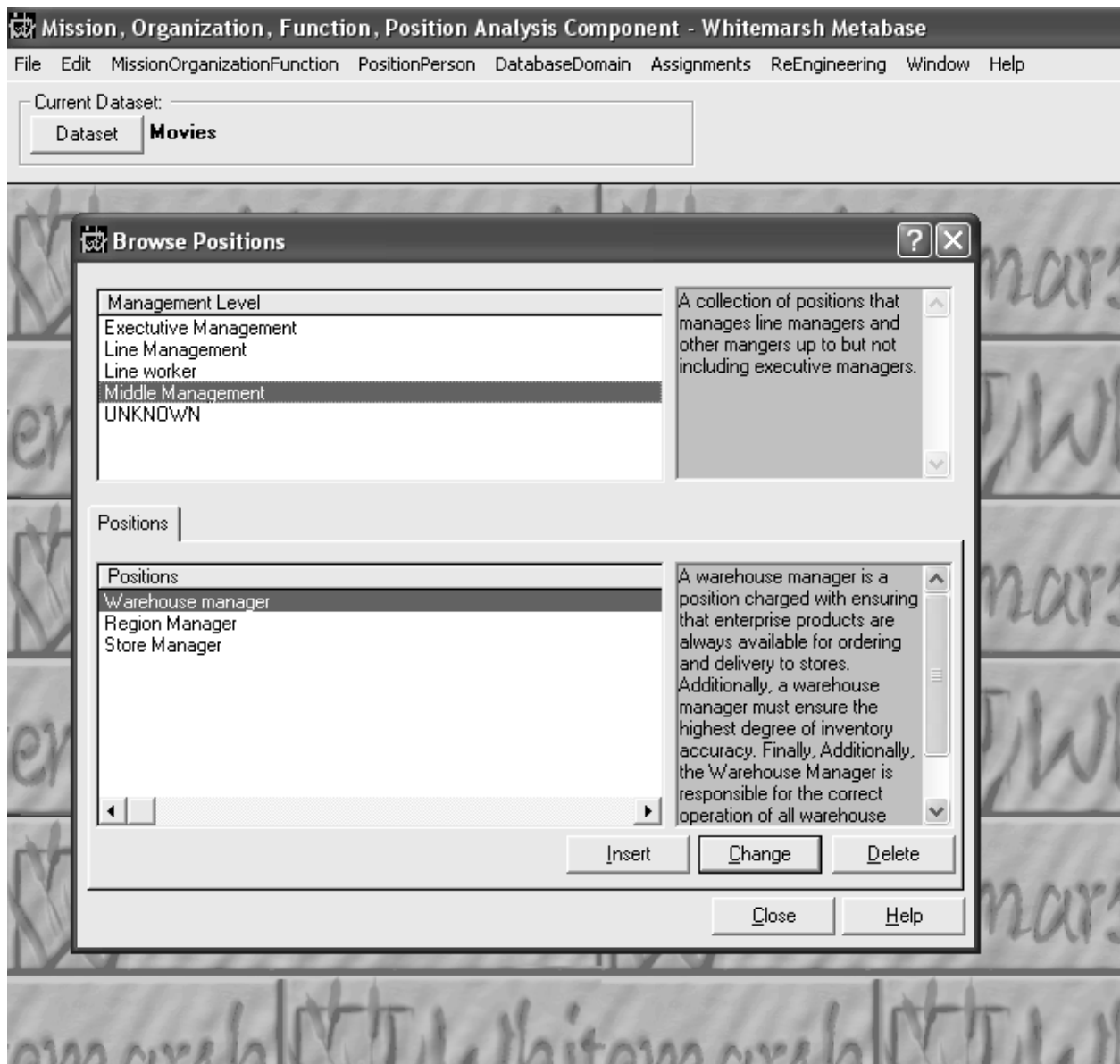


Figure 12. Management Level update screen.



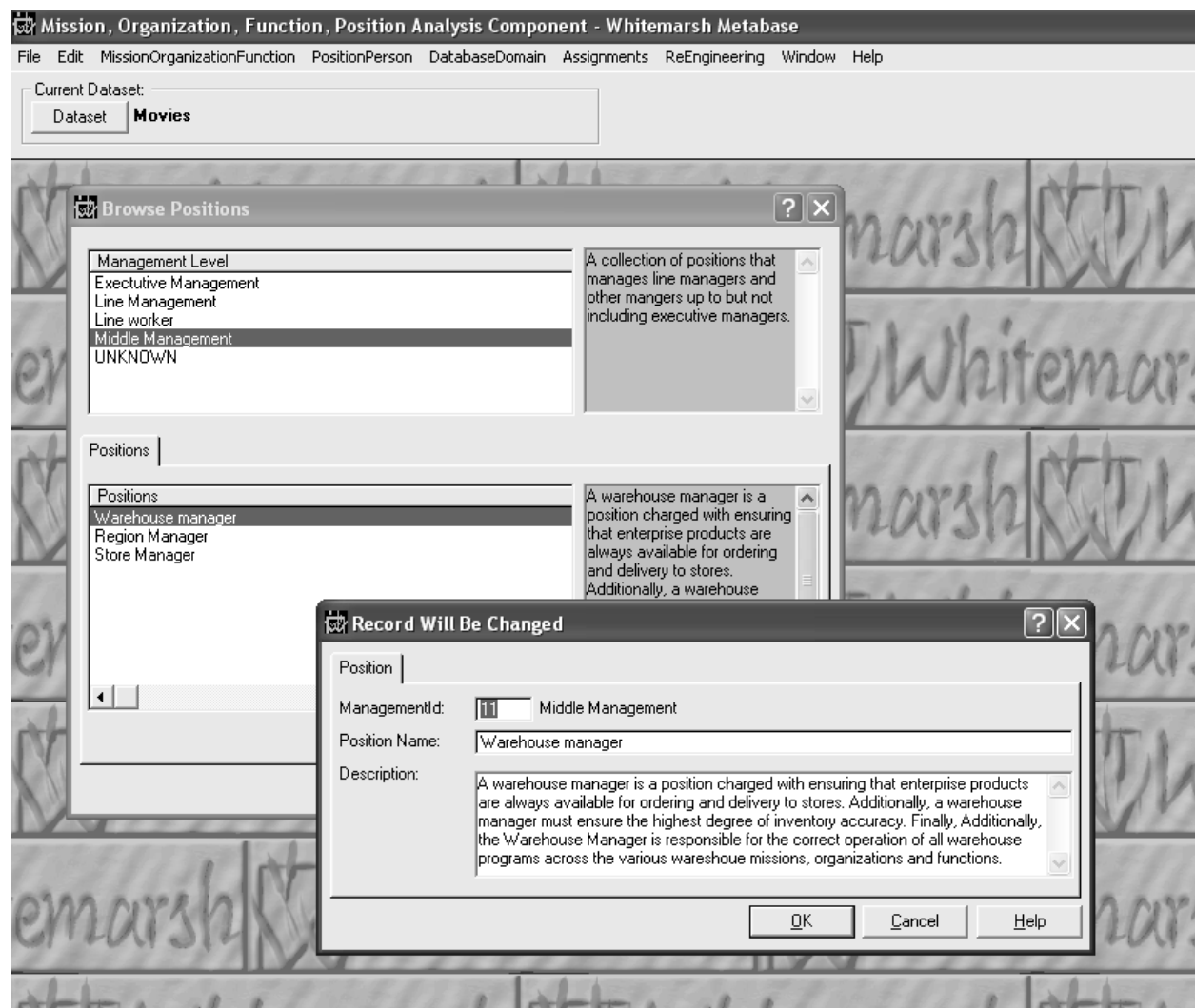
## 6.2.6 Positions

Positions exist within the context of management levels. The list of positions and their corresponding management levels is presented in Figure 13. This figure shows the management levels and their corresponding positions. Figure 14 shows a position update screen. For new positions, placing a “zero” in the management-id field and then tabbing through causes the management level select screen to be displayed. Select a management level and then close the select screen. Thereafter, name and describe the position.



**Figure 13.** List of Positions.





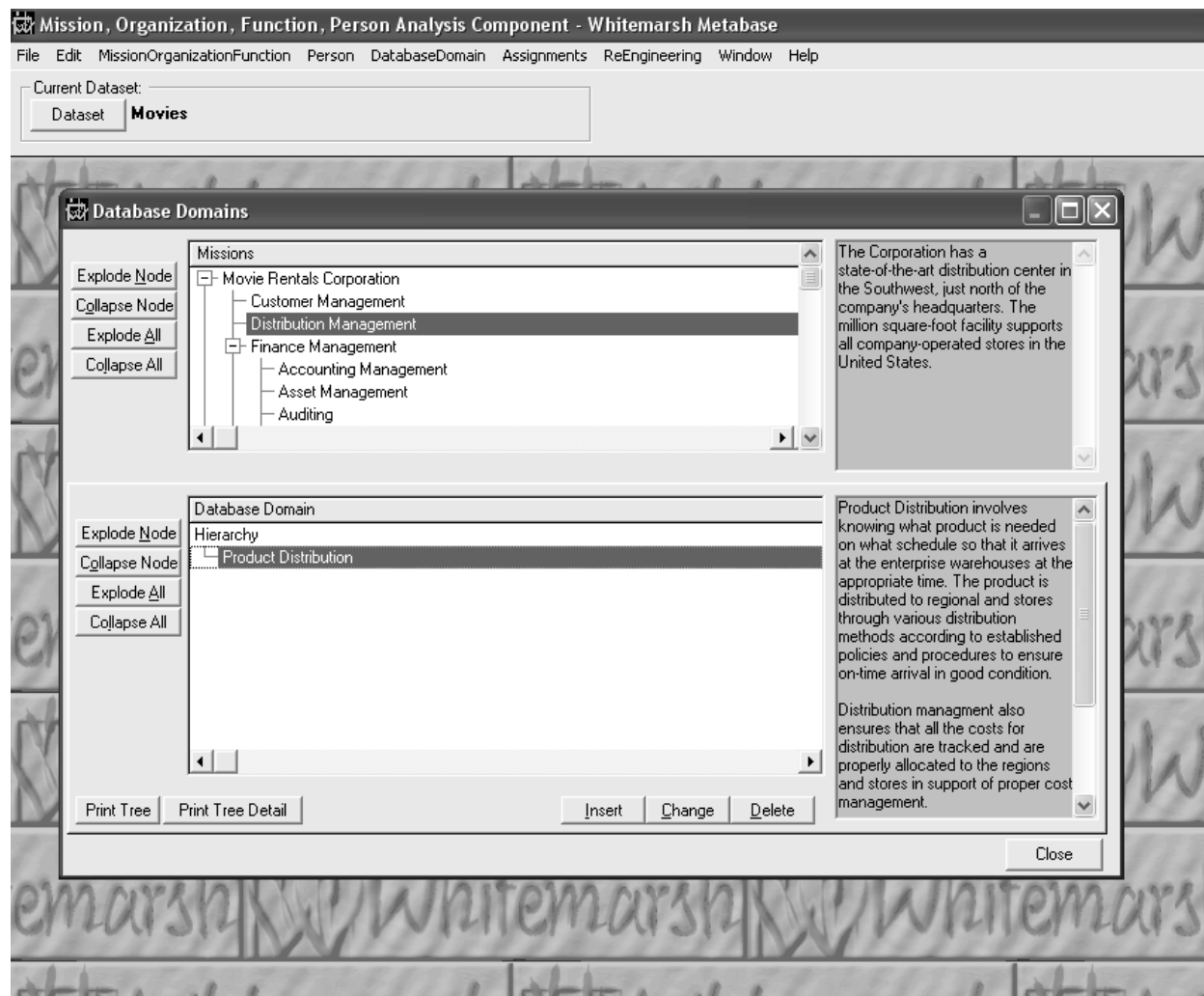
**Figure 14.** Position update screen.



## 6.2.7 Database Domain

A database domain is a data intensive description about the most detailed level of a mission description. Figure 15 lists a set of database domains. This window has a list of missions on top and then the associated list of database domains on the bottom. To find the appropriate database domain, first highlight the mission.

The purpose of the database domain is to then enable the creation of a database domain specific entity relationship diagram. In this context, an entity merely refers to a noun. Thus, some entities may be complex, that is, ultimately result in multiple tables, others may be simple and result in one table, and others may be simple business facts resulting in a column of a table.



**Figure 15.** List of Database Domains.



The database domain description begins with the mission description and then details it further either through a more noun-intensive description, or possibly through a hierarchy of noun-intensive descriptions.

To add a new database domain within an existing database domain, highlight the mission, highlight the parent of the new database domain and press the Insert button. To make a completely new database domain for a mission, highlight the mission, then highlight “Hierarchy” within the database domain window and press the Insert button. To change a database domain, highlight it and press change. To delete a database domain, highlight it and press delete. If the database domain is not at the bottom, it cannot be deleted. You can only deleted from the bottom of any hierarchy. Figure 16 presents the update form for a database domain.

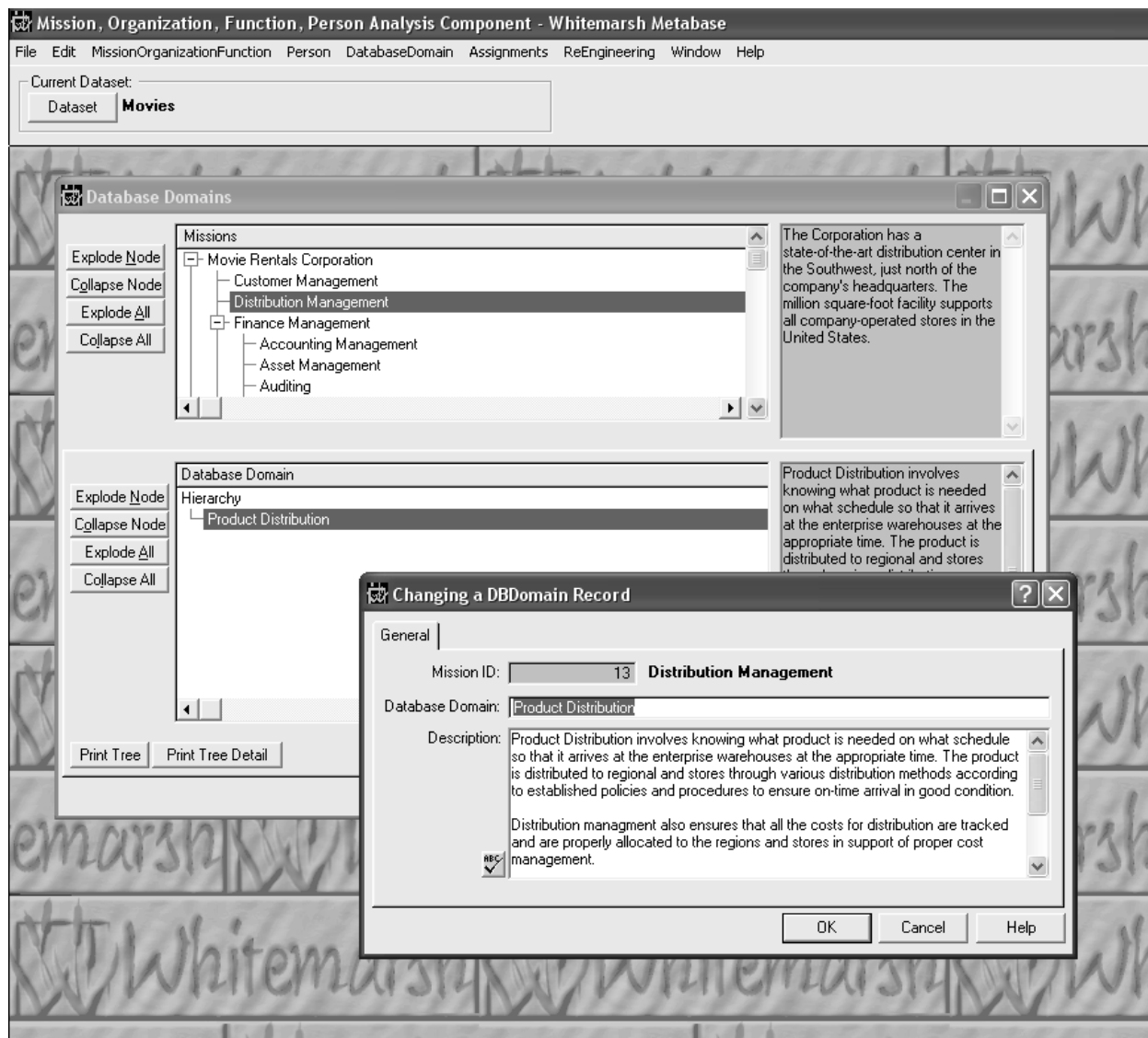


Figure 16. Database Domain update screen.



## 6.3 Assignment Data

The assignment data within this metabase module addresses:

- Mission and Organization
- Mission-Organization and Function
- Mission-Organization-Function and Position

### 6.3.1 Mission and Organization

Figure 17 presents an intersection record operation for relating Missions and Organizations. The strategy is to tag one mission and then tag as many different organizations involved in dealing with that mission. Once all the appropriate organizations are tagged, the Build button is pressed. After a short while the intersection records, that is, those organizations identified with the missions appear in the bottom window.

### 6.3.2 Mission-Organization and Function

The records in the bottom window of Figure 17 represent a valid set of pairs. It is upon this set of pairs that functions are identified. Figure 18 presents the intersection record process for creating Mission Organization Functions. This process consists of tagging one instance of Mission Organization and then tagging as many different instances of Function as appropriate. Once these are tagged, the Build Button is pressed and the intersection records materialize.

### 6.3.3 Mission-Organization-Function and Position

The records in the bottom window of Figure 18 represent a valid set of triples for mission, organization and function. It is upon this set of triples that Mission Organization Function Position assignments are created. The intersection on Figure 19 shows that under the mission, Customer Management, and the responsible organization, Store Operations Management, the Function Accomplish Store Inventory Management is being performed by two positions, Customer Service Representative, a Line worker, and also Store Shit Leader, a Line Management position. Note however that in the bottom right of the browse there is the delete and change buttons. Delete is obvious. Change permits the name and description of the role that is being performed by the position assigned to perform some function within an organization as it accomplishes the mission. Figure 20 shows the role and description update window. Once this data is entered OK should be pressed to cause the complete record to be stored.





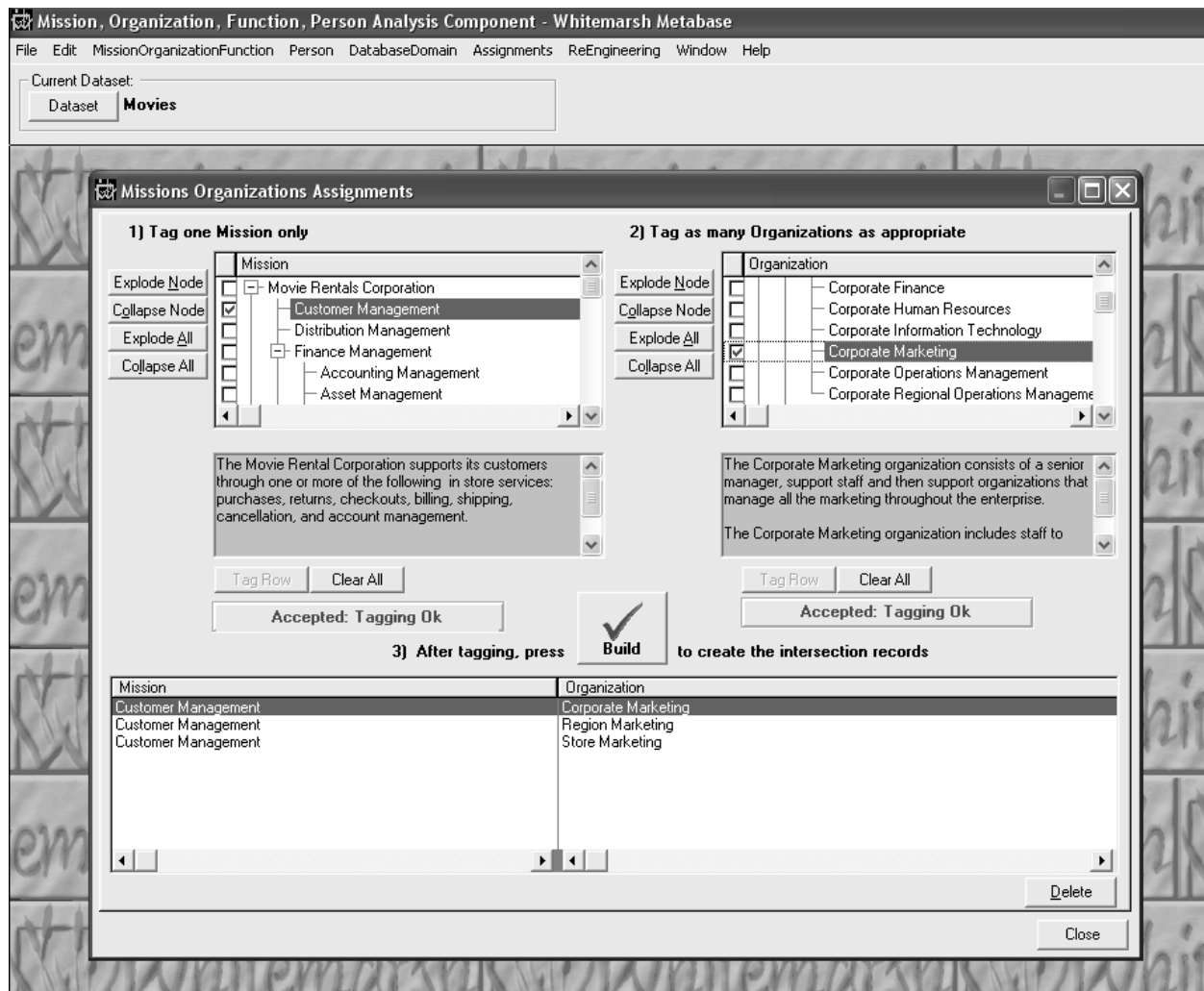


Figure 17. Mission Organization assignment.



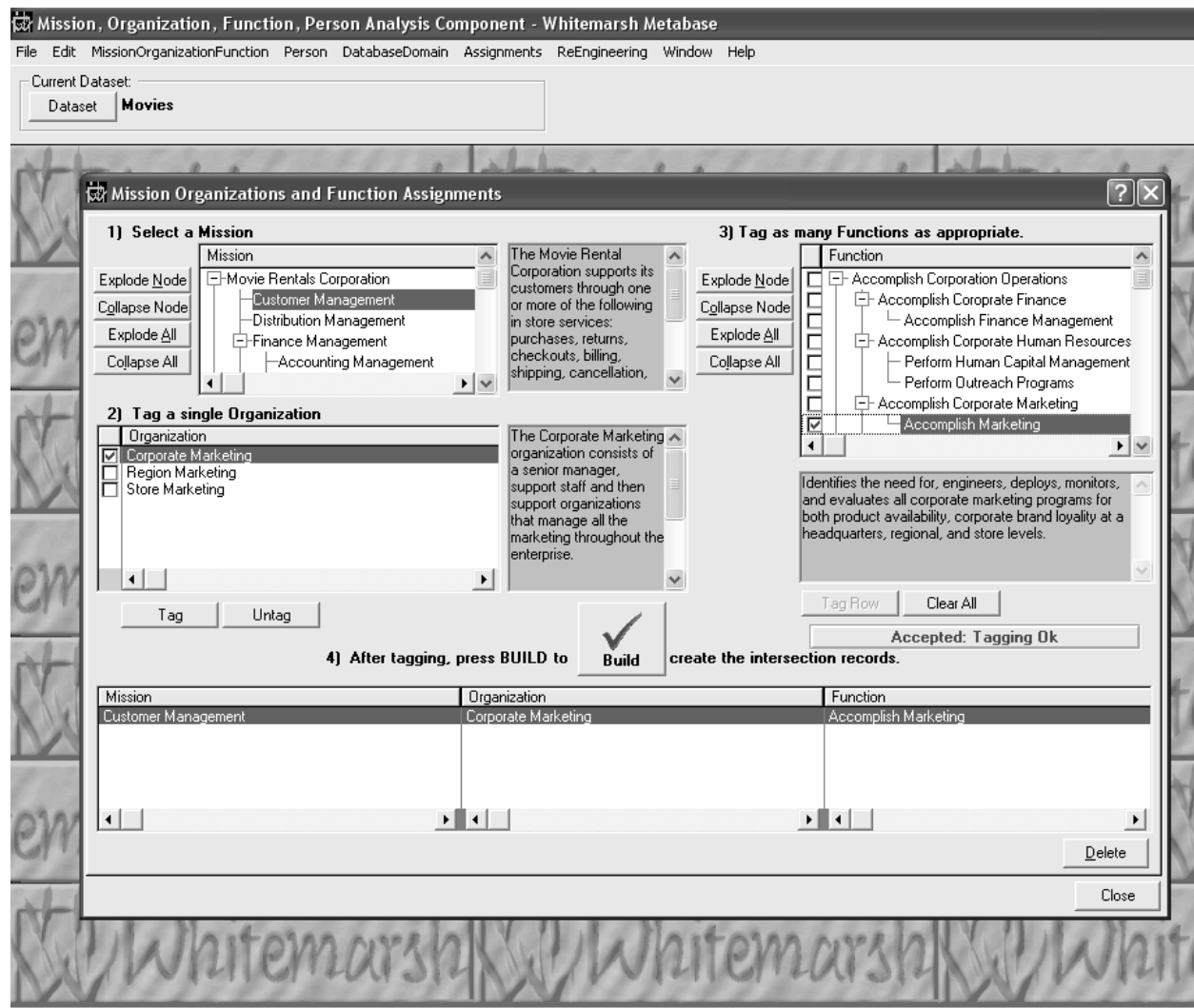


Figure 18. Mission-Organization Function assignment.



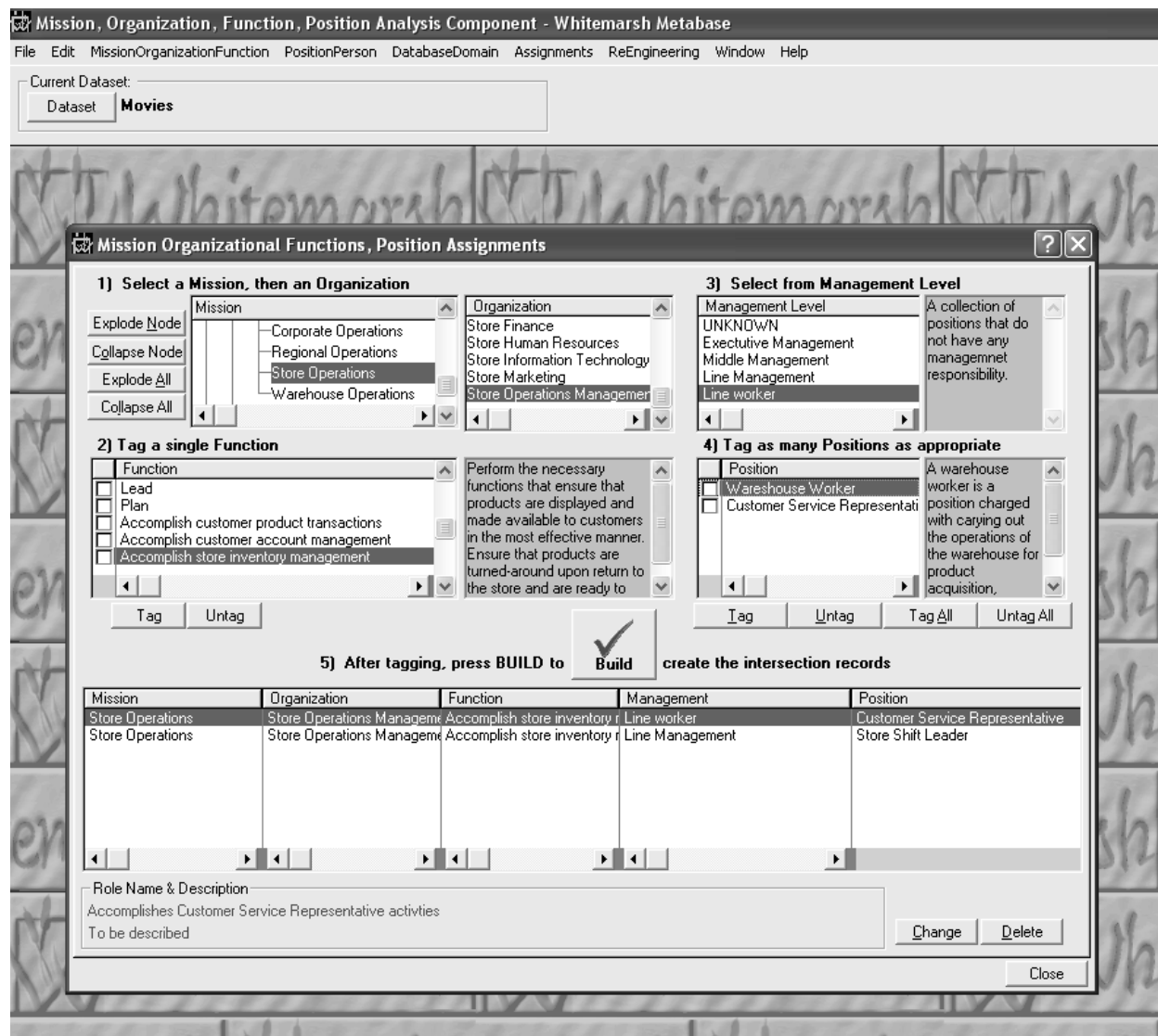
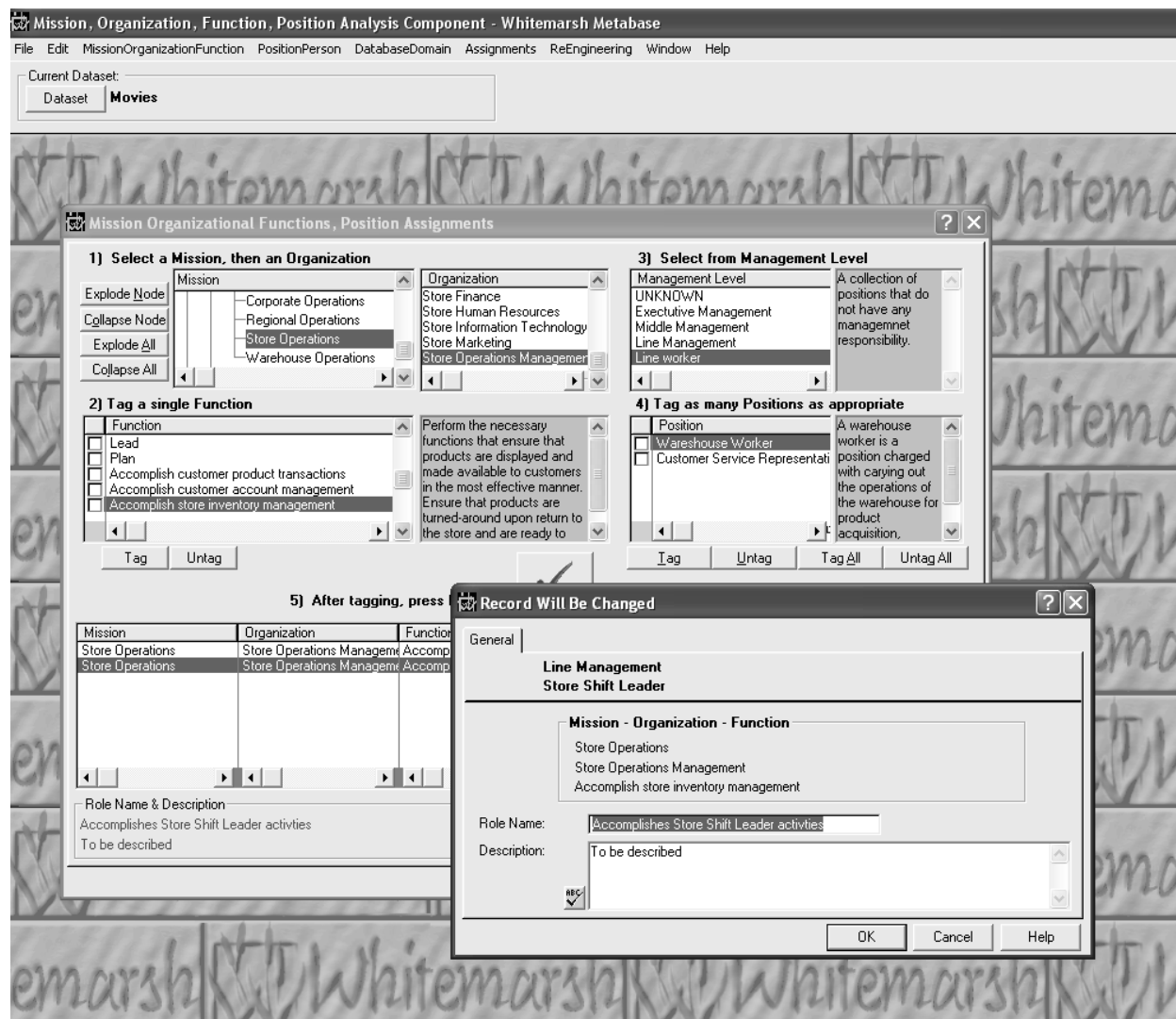


Figure 19. Mission Organization Function Position Assignment screen.





**Figure 20.** Mission-Organization-Function Position Role and Description update screen.



### 6.3.4 Position Person Assignments

Persons are assigned to positions. Figure 21 illustrates that process. In this particular example, a management level is selected, a position is selected and tagged, and then a particular person, Dorothy Alderwood is selected and tagged. When the build button is pressed the person is assigned to the position. The Change button then enables you to update the start and end dates as shown in Figure 22..

**1) Tag a Position**

Management Level

- Executive Management
- Line Management
- Line worker
- ☒ Middle Management
- UNKNOWN

Positions

- ☐ Warehouse manager
- ☒ Region Manager
- ☐ Store Manager

**2) Tag as many Persons as appropriate**

First name	Last name
<input checked="" type="checkbox"/> Dorothy	Alderwood
<input type="checkbox"/> Synthia	Buckingham
<input type="checkbox"/> John	Cash
<input type="checkbox"/> Waylon	Johnson
<input type="checkbox"/> Harry	Jones
<input type="checkbox"/> Ian	McClure
<input type="checkbox"/> Jennifer	Overbrook
<input type="checkbox"/> Mary	Smith
<input type="checkbox"/> UNKNOWN	UNKNOWN
<input type="checkbox"/> John	Wildwood

**3) After tagging, press BUILD to create the intersection records**

Position	First name	Last name	Start Date	End Date
Customer Service Representative	Dorothy	Alderwood	August 24, 1995	August 23, 2001
Store Manager	Dorothy	Alderwood	August 24, 2001	August 22, 2005
Region Manager	Dorothy	Alderwood	August 24, 2005	

Change Delete Close

Figure 21. Position Person Assignment screen.



**Mission, Organization, Function, Position Analysis Component - Whitemarsh Metabase**

File Edit MissionOrganizationFunction PositionPerson DatabaseDomain Assignments ReEngineering Window Help

Current Dataset:

---

**Position Person Assignments**

**1) Tag a Position**

Management Level

- Executive Management
- Line Management
- Line worker
- Middle Management
- UNKNOWN

Positions

- ☐ Warehouse manager
- ☒ Region Manager
- ☐ Store Manager

A collection of positions that manages line managers and other managers up to but not including executive managers.

A warehouse manager is a position charged with ensuring that enterprise products are always available for ordering and delivery to stores. Additionally, a warehouse manager must ensure the highest

**2) Tag as many Persons as appropriate**

First name	Last name
<input checked="" type="checkbox"/> Dorothy	Alderwood
<input type="checkbox"/> Synthia	Buckingham
<input type="checkbox"/> John	Cash
<input type="checkbox"/> Waylon	Johnson
<input type="checkbox"/> Harry	Jones
<input type="checkbox"/> Ian	McClure
<input type="checkbox"/> Jennifer	Overbrook
<input type="checkbox"/> Mary	Smith
<input type="checkbox"/> UNKNOWN	UNKNOWN
<input type="checkbox"/> John	Wildwood

Dorothy Alderwood has been the Harrisburg, PA regional manager for ten years. She progressed from store manager in Camp Hills, PA where she started as a customer service representative.

**Figure 22.** Position Assignment Start and End Date update screen.



## 6.4 Re-Engineering

The re-engineering within this metabase module addresses:

- Missions
- Organization
- Functions

Figures 23, 24, and 25 enable metabase users to “move” missions (or organizations or functions) from one level to the next or to another “parent.” Additionally, you can make a nested mission (or organization or function) a top (root) level item by checking the make root check box.

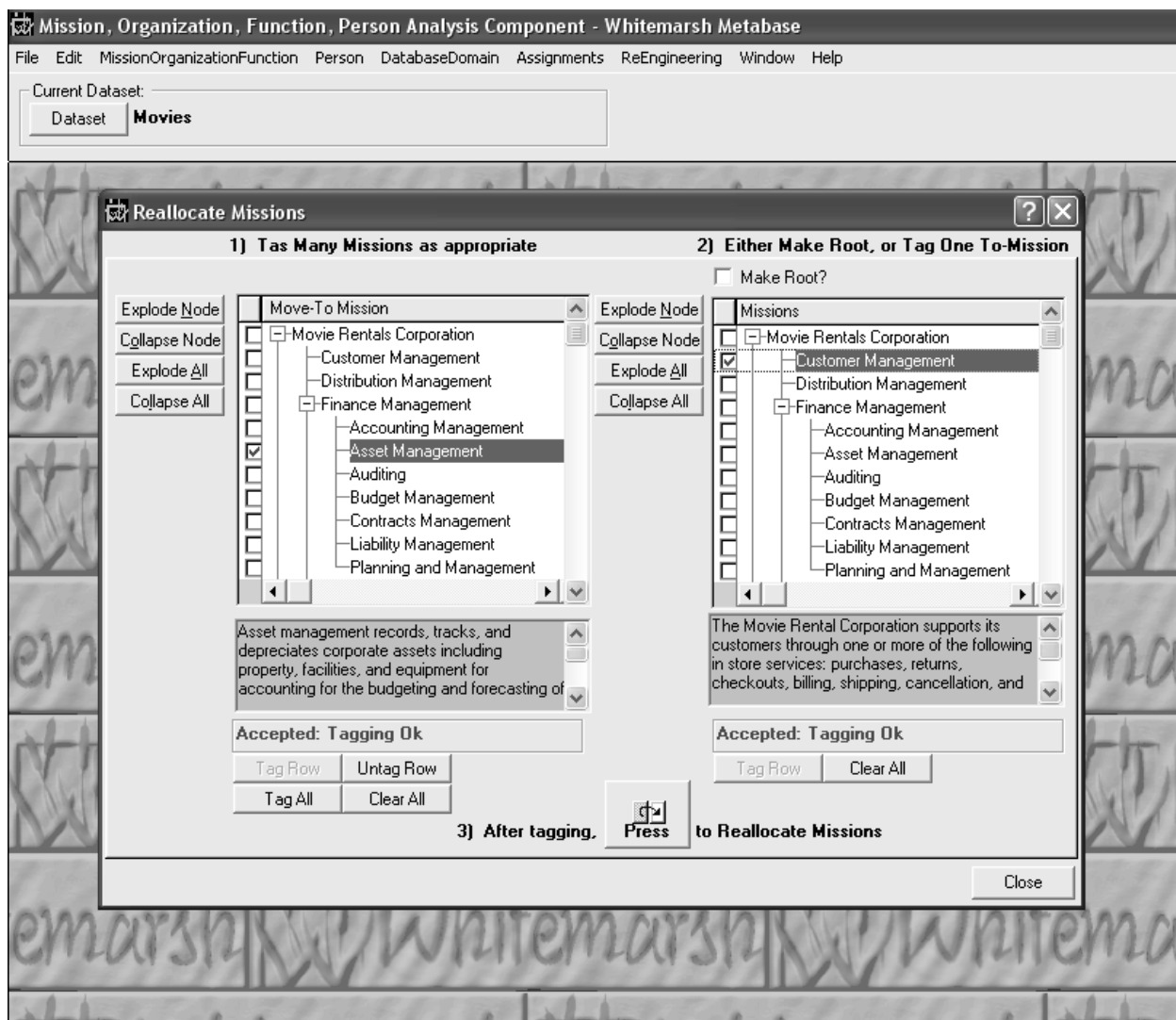


Figure 23. Mission re-engineering screen.



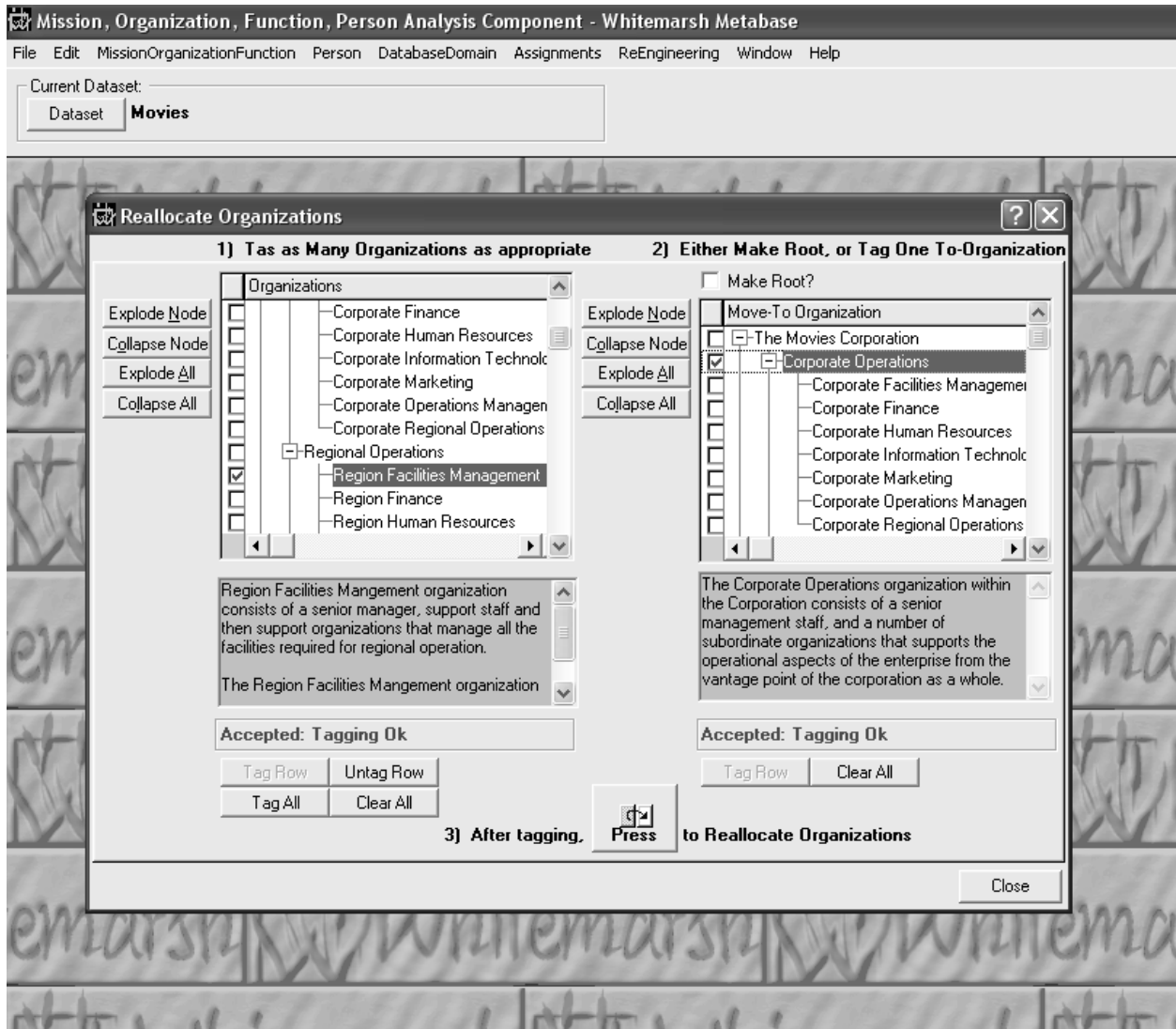


Figure 24. Organization re-engineering screen.





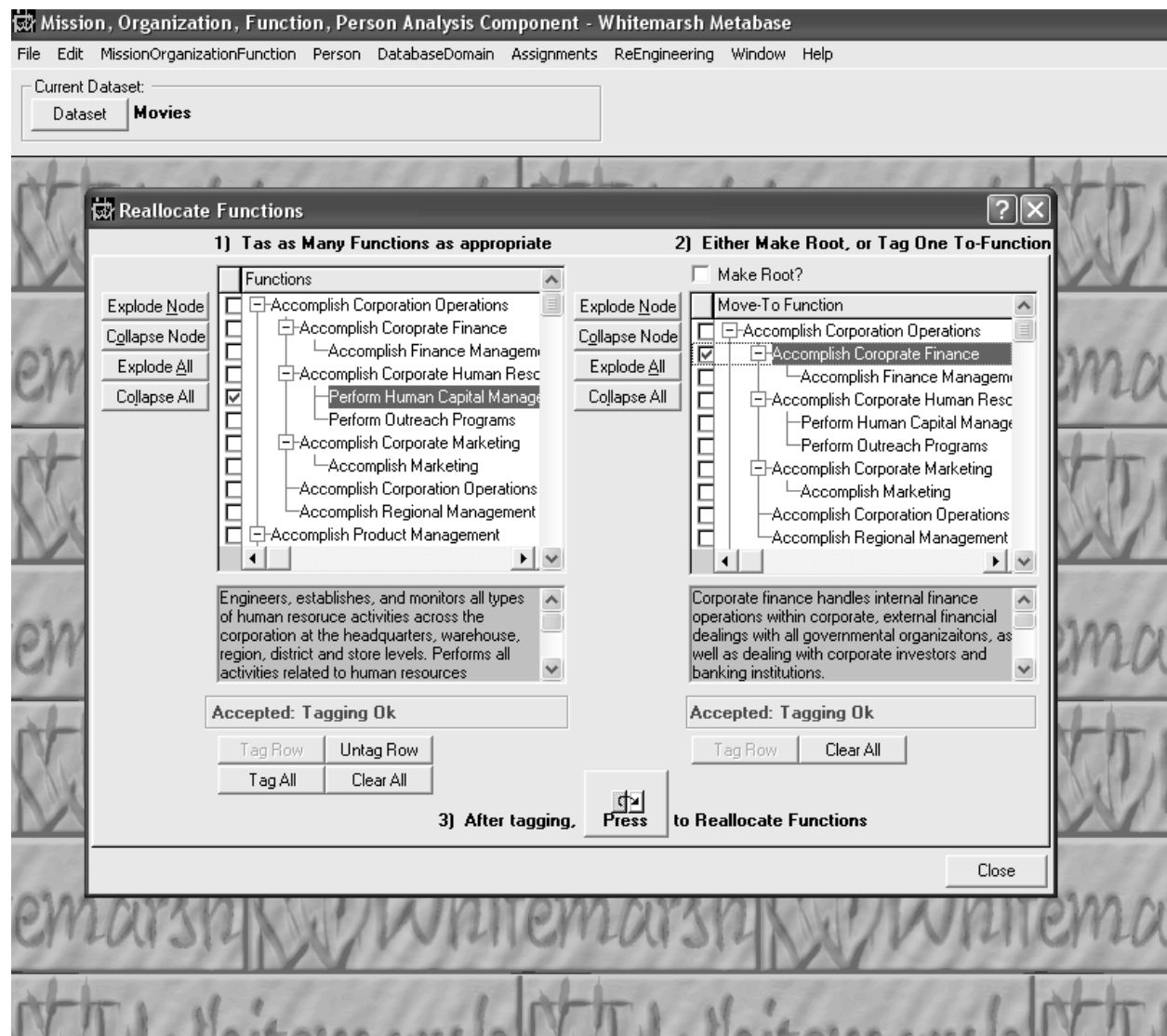


Figure 25. Function re-engineering screen.



## **6.5 Reports**

Reports are accomplished through access to a particular metabase database instance through commercial report writers such as Crystal Reports. Whitemarsh provides about 100 such report templates for Crystal Report access from the Whitemarsh website.

