

Massachusetts Department of Revenue
Division of Local Services



**DATABASE UTILITIES
RPIS VERSION 3**

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DATABASE MAINTENANCE UTILITIES

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Introduction

What are utilities?

The RPIS system contains many programs. Most programs deal with entering and managing real property data. Some programs provide other functions not directly relating to the data; these ancillary programs are known as utilities.

Utility programs used to be contained in a separate Utilities module. Starting with Version 3, the utility programs are now listed under the Utilities menu in the Data Management module.

Special system permissions are assigned to utility programs. A user with permission to use other programs in Data Management may or may not have permission to use various utility programs. The system administrator can add or modify these permissions if appropriate.

Accessing Data Management

If there is an icon for Data Management, or DMT, on your desktop, double-click it to start the program.



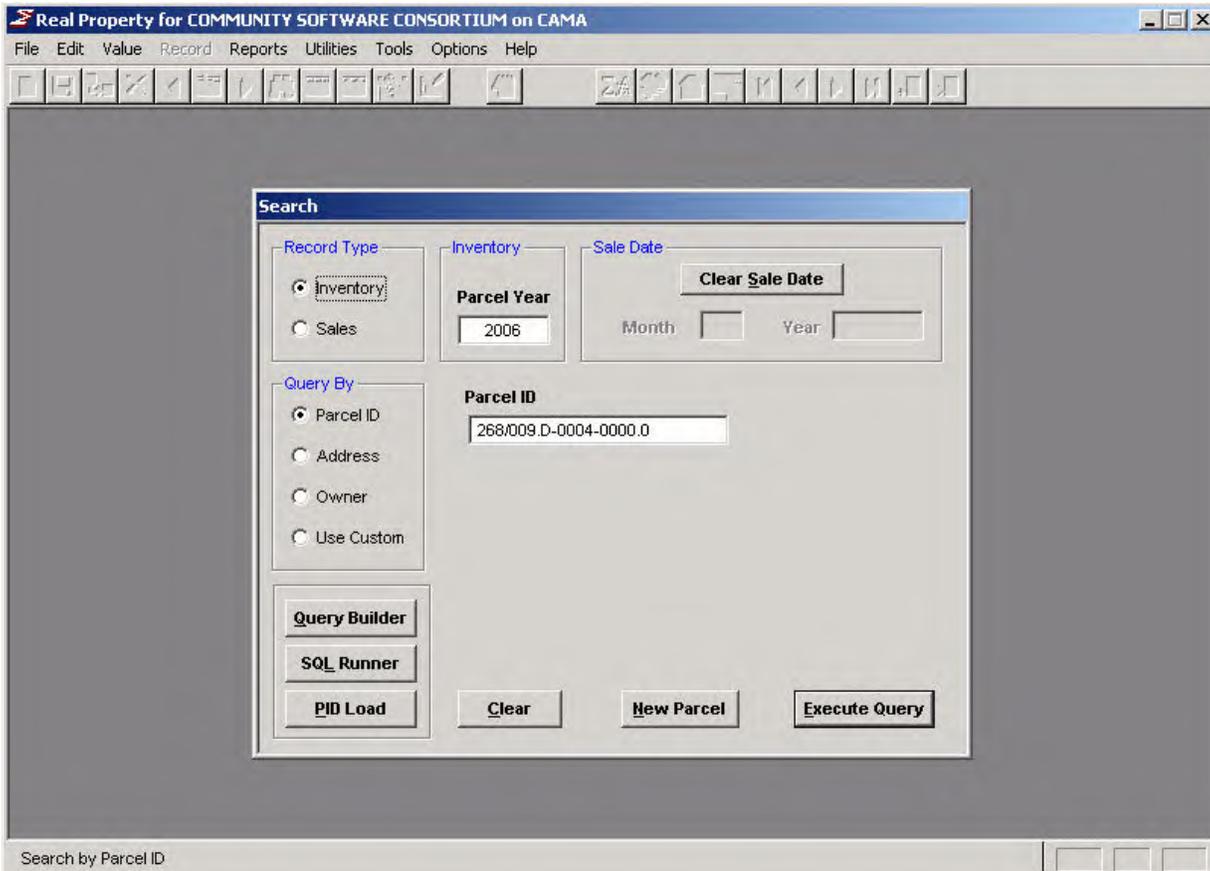
If you do not have an icon on the desktop:

Click Start > Programs > Sigma Systems > Data Management.

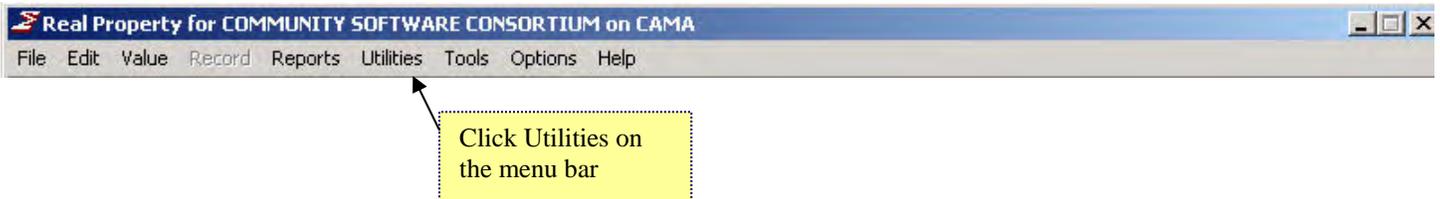
A screenshot of a Windows-style dialog box titled "Real Property - User Login". The dialog has a light gray background and a blue title bar. It contains three input fields: "User ID" (a text box), "Password" (a text box), and "Database" (a dropdown menu currently showing "CAMA"). To the right of these fields are three buttons: "Connect", "Cancel", and "About...". At the bottom of the dialog, there is a wide, thin text box containing the red text "Enter user ID and password.".

Enter your User ID and your password, then click the Connect button (or simply press the Enter key.)

Accessing the Utilities Menu



The Utilities menu can be accessed from any DMT screen by clicking the word “Utilities” on the menu bar.



Once “Utilities” is clicked, the Utilities menu will drop down, displaying a number of different utility categories.



The arrows to the right of the menu options indicate that an additional menu is available for each utility category. Click a category to see its submenu.

Each category will be discussed below.

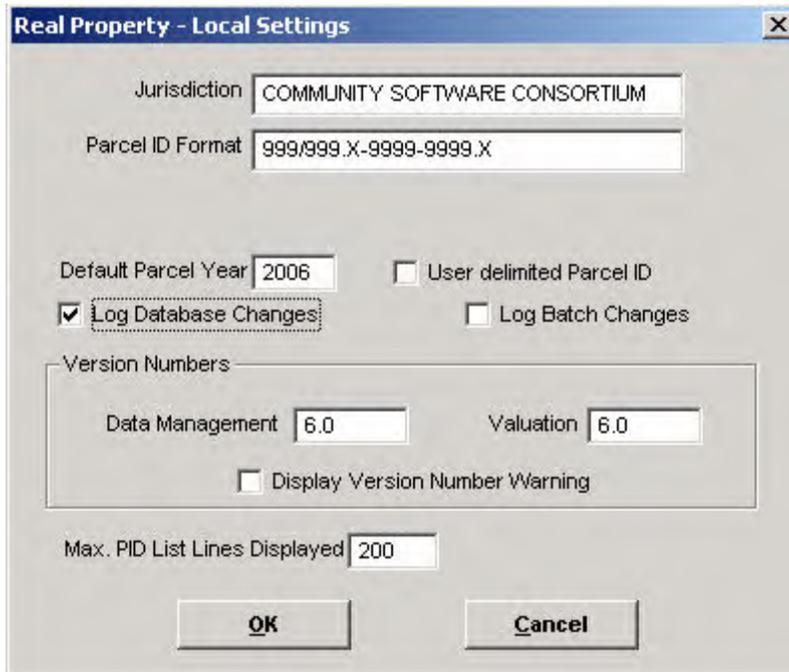
Dbms Maint (Database Maintenance Utilities)

The Dbms Maint (Database Maintenance) utility menu is used to perform tasks that impact the database as a whole.

Local Settings...	<i>Local Settings:</i> used to set database defaults like community name and fiscal year
Context Help Settings...	<i>Context Help Settings:</i> used to modify some of the online help settings (you should not modify these yourself.)
Table/Column List...	<i>Table/Column list:</i> for customizing database fields and predefined values
Data Dictionary...	<i>Data Dictionary:</i> prints a definition of each table with field and value information
Unlock Parcel	<i>Unlock Parcel:</i> removes the “locked” (or read only) attribute from a parcel

Local Settings

The Local Settings dialog box is used to set certain global database defaults.



The most important options are:

Jurisdiction – the text entered here will appear at the top of every printed report. Make sure the community or district name is spelled correctly.

Default Parcel Year – this tells RPIS what year to use in parcel selections and some other dialog screens.

Your community’s CAMA advisor entered the local settings when the system was first installed. You should change the default year whenever Year Tag Rollover is run, or at the beginning of each new fiscal year. Contact CAMA Support before changing any other settings.

Context Help Settings

These settings impact the online help system. Sigma Systems maintains the online help system so you should not modify any of these settings yourself.

Table Column List

The Table/Column list utility allows customization of the data dictionary. Values can be added to the fields using classification lists, and user-defined fields can be added to records and data entry screens.

Table List

Table Name: Table Alias: Table Type:
 Label: Table Abbr: Report Order: Child Type:
 Parent Table: Summary Form: Two Part Id:
 Maint. Form: Key Level: Comments Type:
 Description: Tab Count: Auto Renumber:
 Sub Key 1 Name: Sub Key 1 Size: Allow Navigate:
 Sub Key 2 Name: Sub Key 2 Size:

Column List

Column Name	Column Label (click to edit)	Screen Label (click to edit)	Column Number	Display Order	Column Type	Column Size	Display Mask (click to edit)	Req. Field	Low Value
ACTIVE	Active		1	5	L	1.0		N	
STATE_USE_CD	State Use Cd		17	10	L	3.0		Y	
OWN_ACCT_NUM	Own Acct Num		56	15	V	18.0		N	
ASSOC_PAR_1	Assoc Par 1		2	20	V	20.0		N	
ASSOC_PAR_2	Assoc Par 2		3	25	V	20.0		N	
PAR_ADD_NO_1	Par Add No 1		4	30	N	10.0	#####	Y	
PAR_ADD_NO_A	Par Add No A		66	35	V	5.0		N	
PAR_ADD_NO_2	Par Add No 2		5	40	N	10.0	#####	N	
PAR_ADD_ST_1	Par Add St 1		6	45	V	20.0		Y	
PAR_ADD_ST_2	Par Add St 2		7	50	V	20.0		N	

Buttons:

The Table/Column Information screen has two parts: the table information section on top and the column information section on the bottom. To view or edit column information, first select the table from the drop-down list. The column list will be filled with columns from that specific table (the Parcel table is always displayed first by default.)

Modifying a column's classification list

Some database columns have a list of options attached; these are called classification fields (column type "L"). Data typed into such columns has to match an option on this list. It is possible to add, delete or change options to most classification lists if the data is descriptive and doesn't affect value (consult CAMA Support before making any changes to a classification list.)

To modify a column's classification list, follow these steps:

- Select a table using the Table Name drop-down list.
- Use the scroll bar to locate a specific column name.
- Select the column by clicking once on the Column Name; the entire row will be highlighted.

Real Property - Table/Column Information

Table List

Table Name: RESIDENCE
 Label: RESIDENCE Table Abbr: RES
 Parent Table: PARCEL
 Maint. Form:
 Description: RESIDENCE
 Sub Key 1 Name: RECID1
 Sub Key 2 Name:

Table Alias: R
 Report Order: 2000
 Summary Form: Y
 Key Level: 1
 Tab Count:
 Sub Key 1 Size: 4
 Sub Key 2 Size:

Table Type: D
 Child Type: D
 Two Part Id: N
 Comments Type:
 Auto Renumber: Y
 Allow Navigate:

Column List

Column Name	Column Label (click to edit)	Screen Label (click to edit)	Column Number	Display Order	Column Type	Column Size	Display Mask (click to edit)	Req. Field	Low Valu
SKETCH	Sketch		1	5	V	2000.0		N	
STATE_USE_CD	State Use Cd		2	10	L	3.0		Y	
OCCUPANCY	Occupancy		3	15	N	1.0	#	Y	
BLDG_STYLE	Bldg Style		4	20	L	2.0		Y	
CONVERSION	Conversion		5	25	L	1.0		N	
STORY_HEIGHT	Story Height		6	30	N	4.2	##.00	Y	1
ROOF_TYPE	Roof Type		7	35	L	1.0		Y	
ROOFING	Roofing		8	40	L	2.0		Y	
EXT_WALL_TYP	Ext Wall Typ		9	45	L	2.0		Y	
MASONRY_TRIM	Masonry Trim		10	50	N	4.0	###	N	

OK Save **Values** Cancel

- Click the Values button at the bottom of the screen to display the current Values list.

Real Property - Value List Codes

Use values from other column: Load other values

Table Name:
 Column Name:

Columns using values from this column:

This field's current values

Seq	Code	Description
1	BN	COTTGE-BNGLW
2	RN	RANCH
3	RR	RAISED-RANCH
4	SL	SPLIT-LEVEL
5	CP	CAPE-COD
6	RC	RAISED-CAPE
7	CL	COLONIAL

OK Cancel

- To *add a value* to the list: scroll to the bottom of the list and click the last row. Press the Insert key to open a new, blank line at the bottom of the list. Type the sequence number (add one to the last number shown), the new code and a description. Use the Tab key or the mouse to move from field to field.
- To *modify an existing value*: simply type over any existing entries.
- To *delete a value*: click the gray box to the left of the sequence number to select a value row and press the Delete key.
- Click OK to save the changes, or Cancel to disregard them.

Click OK on the Table/Column list screen to save changes.

Adding a Custom User Field

Each table contains a certain number of spare “user” fields. These fields can be customized according to a community’s specific needs.

There are several types of fields that can be customized:

Field Type	User fieldname	Used for:
Character	Userchar	Descriptive data where any entry is okay
Numeric	Usernum	Numeric data
List	Userlist	Data where specific entries are required
Date	Userdate	Dates

Sigma Systems has assigned a variety of user fields, using a variety of field lengths, to each table. They do not appear in the data entry screens until they are modified using the Table/Column List utility. When customized, user fields appear on the Local sheet of each record in the position that’s been pre-assigned by Sigma Systems.

In the examples below, District information will be added to the Parcel table using the different field types. When deciding what kind of user field to add, it is important to consider not only the type of information to be stored, but how the information will be pulled back out of the database in reports. Sometimes the character type is the right choice, and sometimes the user list type is more appropriate. Sometimes numeric data can be stored in a character field and sometimes it needs to be a numeric field. It is vitally important to analyze the data to be stored before modifying the user fields; it may not be possible to change the field type once the data has been entered.

Adding a character field

In this example a character type field labeled “District” will be added to the parcel table.

In the Table/Column List screen select the Parcel table. Scroll down the column list and locate the USERCHAR fields. Click on the field you wish to customize. This example uses USERCHAR_9, which will be customized as “District.”

Real Property - Table/Column Information

Table List

Table Name: PARCEL
 Label: PARCEL
 Table Abbr: PAR
 Parent Table:
 Maint. Form:
 Description: PARCEL
 Sub Key 1 Name:
 Sub Key 2 Name:

Table Alias: P
 Report Order: 100
 Summary Form: Y
 Key Level: 0
 Tab Count:
 Sub Key 1 Size:
 Sub Key 2 Size:

Table Type: D
 Child Type:
 Two Part Id: N
 Comments Type:
 Auto Renumber: N
 Allow Navigate:

Column List

Column Name	Column Label (click to edit)	Screen Label (click to edit)	Column Number	Display Order	Column Type	Column Size	Display Mask (click to edit)	Req. Field	Low Value
ACTIVE	Active		1	5	L	1.0		N	
STATE_USE_CD	State Use Cd		17	10	L	3.0		Y	
OWN_ACCT_NUM	Own Acct Num		56	15	V	18.0		N	
ASSOC_PAR_1	Assoc Par 1		2	20	V	20.0		N	
ASSOC_PAR_2	Assoc Par 2		3	25	V	20.0		N	
PAR_ADD_NO_1	Par Add No 1		4	30	N	10.0	#####	Y	
PAR_ADD_NO_A	Par Add No A		66	35	V	5.0		N	
PAR_ADD_NO_2	Par Add No 2		5	40	N	10.0	#####	N	
PAR_ADD_ST_1	Par Add St 1		6	45	V	20.0		Y	
PAR_ADD_ST_2	Par Add St 2		7	50	V	20.0		N	

Buttons: OK, Save, Values, Cancel

Scroll down the list of fields until the USERCHAR fields are visible

Note: USERCHAR fields have varying maximum lengths. Make sure you choose a field with a Column Size large enough to contain the data you wish to store.

Click the Column Label field in the row you wish to customize; a Label box will appear. Replace the generic field label with your own description and click Close. Capitalization does not matter. Even though the box appears spacious, there is a maximum length for the label; characters typed in excess of the maximum will not be displayed.

Real Property - Label Name

District

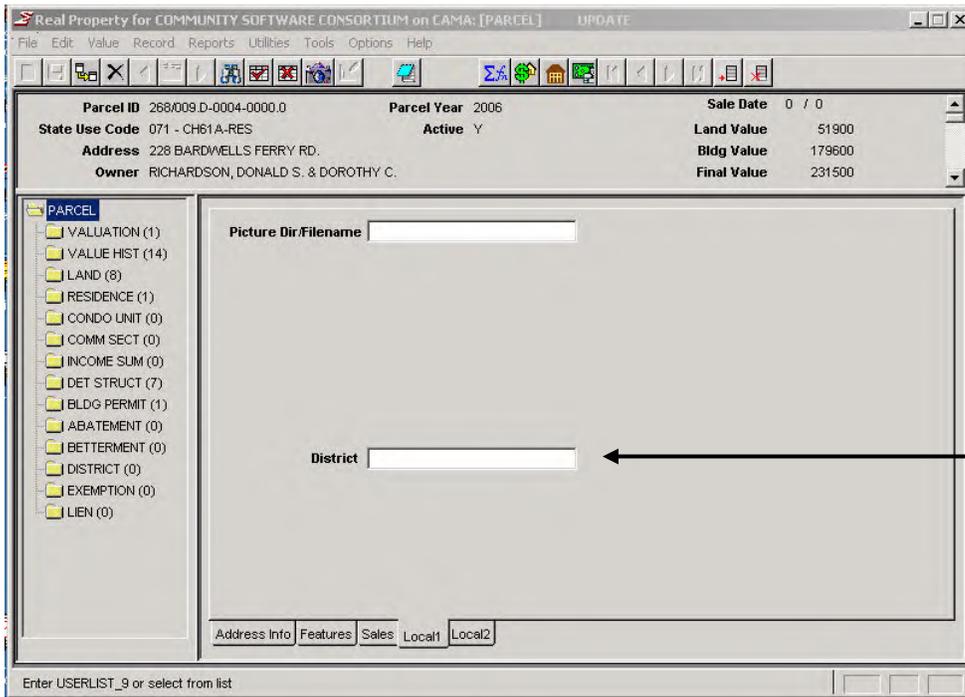
Replace the generic column label with a custom label.

Close

While the row is still selected, scroll to the right and type an "A" in the Special Action column. This tells the system to add the column to the table's data management screen.

Column Name	Low Value	High Value	Override Allowed	Zero Allowed	Special Action
USERCHAR_9			Y	N	A

Click OK to save the change and return to Data Management. The customized field will appear on the first Local sheet:



Adding a numeric field

- To add a numeric field, select the table as described above and scroll down to the USERNUM fields.
- Click the Column Label field and replace the generic label. Click Close.

Column List

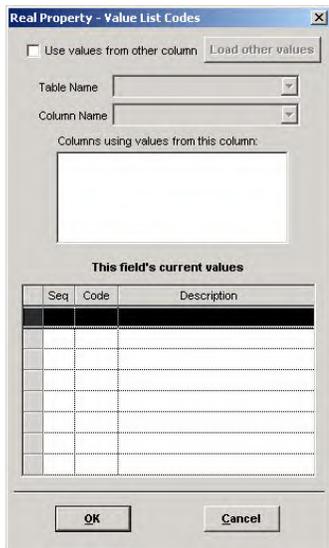
Column Name	Column Label (click to edit)	Screen Label (click to edit)	Column Number	Display Order	Column Type	Column Size	Display Mask (click to edit)	Req. Field	Low Valu
USERLIST_8	Userlist 8		101	485	L	4.0		N	
USERLIST_9	Updt Bldg Pct		102	490	L	4.0		N	
USERLIST_10	Updt Land Pct		103	495	L	4.0		N	
USERNUM_1	Pct in District		104	500	N	12.2	#####.00	N	
USERNUM_2	Usernum 2		105	505	N	12.2	#####.00	N	
USERNUM_3	Usernum 3		106	510	N	12.2	#####.00	N	
USERNUM_4	Usernum 4		107	515	N	12.2	#####.00	N	
USERNUM_5	Usernum 5		108	520	N	12.2	#####.00	N	
USERNUM_6	Usernum 6		109	525	N	12.2	#####.00	N	
USERNUM_7	Usernum 7		110	530	N	12.2	#####.00	N	

- While the row is still selected, scroll to the right and type an “A” in the Special Action column. This tells the system to add the column to the table’s data management screen.
- If you wish to restrict data to a certain range of numbers, enter the lowest acceptable value in the Low Value column and the highest acceptable value in the High Value column.
- Click OK to save the change and return to Data Management. The customized field will appear on the Local sheet.

Adding a List field

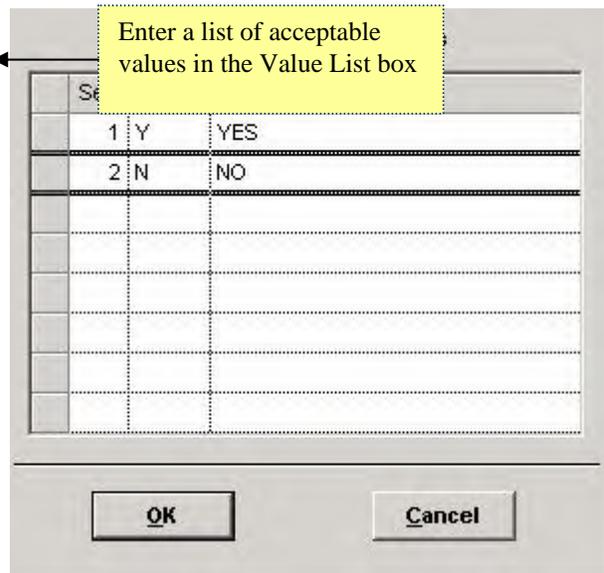
To add a classification list field, select the table as described above and scroll down to the USERLIST fields. Click the Column Label field and replace the generic label. Click Close.

To build a list of acceptable values for data entry, click the Values button. A blank Values List dialog box will appear.



Press the Insert key to start inserting values in the list: type a sequence number (start with 1), a code and a code description for each allowable value. Use the Tab key or the mouse to move from column to column.

Our sample field, Fire District, will have only two acceptable values: Y for Yes, and N for No.



Click OK to save the list and return to the Table/Column List screen.

Using values from another list

If another classification list column already contains a list of values that you wish to use again, you can tie the existing list to your new field.

Column List

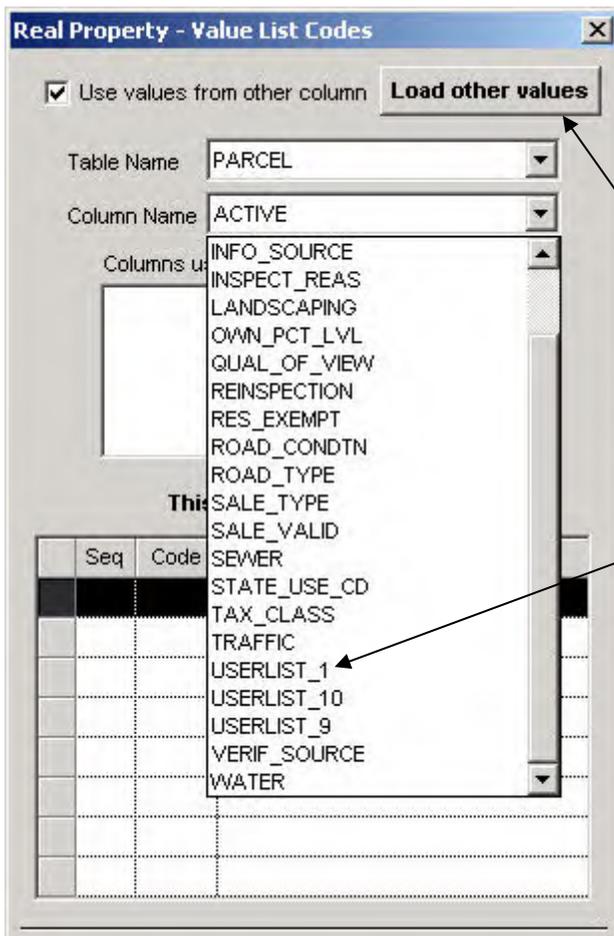
Column Name	Column Label (click to edit)	Screen Label (click to edit)	Column Number	Display Order	Column Type	Column Size	Display Mask (click to edit)	Req. Field	Low Valu
USERCHAR_19	Userchar 19		92	440	V	100.0		N	
USERCHAR_20	Picture Dir/File		93	445	V	20.0		N	
USERLIST_1	Fire District		94	450	L	4.0		N	
USERLIST_2	Water District		95	455	L	4.0		N	
USERLIST_3	Userlist 3		96	460	L	4.0		N	
USERLIST_4	Userlist 4		97	465	L	4.0		N	
USERLIST_5	Userlist 5		98	470	L	4.0		N	
USERLIST_6	Userlist 6		99	475	L	4.0		N	
USERLIST_7	Userlist 7		100	480	L	4.0		N	
USERLIST_8	Userlist 8		101	485	L	4.0		N	

OK Save Values Cancel

In our example we created a Fire District field using USERLIST_1 with a value list of Y and N. We can add a second field, Water District using USERLIST_2 and use the same value list without retyping the value list.

To attach an existing value list to another field:

- Once the new field label has been assigned, click Values to see the Value List dialog box.
- Check the Use Values from Other Column check box (click inside the box and a check will appear.)
- In the Column Name drop-down list select the USERLIST_1 column (the column that has the Y/N list we wish to reuse.)
- Click the Load Other Values button. The values from the Fire District field will be loaded to the new Water District field.
- Click OK to save the list and return to the Table/Column List screen.



Adding a Date column

- To add a date field, select the table as described above and scroll down to the USERDATE fields.
- Click the Column Label field and replace the generic label. Click Close.
- While the row is still selected, scroll to the right and type an "A" in the Special Action column. This tells the system to add the column to the table's data management screen.
- Click OK to save the change and return to Data Management. The customized field will appear on the Local sheet.

Editing a column's range of values

A numeric column will sometimes have a range of values assigned to it that limits acceptable data to numbers within that range. Occasionally a parcel will have unique characteristics like an overly large number of rooms or perimeter measurements that exceed the norm. This data can be entered but will be considered an error by the error checking system. If enough properties have the same data to make this a problem, the range can be changed to accommodate the larger (or smaller) values.

To modify a numeric column's range of values:

- Select the column from the column list
- Scroll to the Low Value and High Value columns
- Modify the entries as required and click OK to save the change.

In the example below, the upper limit attached to a detached structure's Sound Value isn't high enough. To increase the upper limit the Sound Value column's High Value entry is manually changed from 100000 to 200000.

The screenshot shows the 'Real Property - Table/Column Information' dialog box. The 'Table List' section has 'DET_STRUCTURE' selected. The 'Column List' section contains the following data:

Column Name	Display Order	Column Type	Column Size	Display Mask (click to edit)	Req. Field	Low Value	High Value	Override Allowed
SOUND_VALUE	95	N	9.0	#####	N	0.00000	100000.00000	Y
COST_BLDG	100	N	9.0	#####	N			Y
INCOME_FLAG	105	L	1.0		N			Y
MEMO	110	V	1000.0		N			Y
USERCHAR_1	115	V	20.0		N			Y
USERCHAR_2	120	V	20.0		N			Y
USERLIST_1	125	L	4.0		N			Y
USERLIST_2	130	L	4.0		N			Y
USERNUM_1	135	N	12.2	#####.00	N			Y
USERNUM_2	140	N	12.2	#####.00	N			Y

An arrow points from the 'High Value' of 100000.00000 for the 'SOUND_VALUE' column to a callout box showing 'Low Value' as 0.00000 and 'High Value' as 200000.

Note: to remove error flags from parcels affected by this type of range error you must run the Re-Edit utility described in the *DMT Maint* section of this guide.

Data Dictionary

The Data Dictionary utility displays and prints a detailed description of all columns in a specified database table. To print a data dictionary report for a specific table, select "Data Dictionary" from the Dbs Maint utility menu; the Data Dictionary dialog box will appear.

The screenshot shows the 'Real Property - Data Dictionary' dialog box. It contains the text 'Please select a table to print' and a drop-down list with 'ALL' selected. There are 'OK' and 'Cancel' buttons at the bottom.

Select a table from the drop-down list and click OK. The report will be displayed.

DDLST		COMMUNITY SOFTWARE CONSORTIUM C&MA DATA DICTIONARY				04/25/05		PAGE 4	
DATA TYPE : LAND (CONTINUED)									
DISPLAY ORDER	COLUMN NAME	LABEL NAME	REQ'D	TYPE	SIZE	ALLOW OVERRIDE	ALLOW ZERO	EDITS / CODES	
								812	- PICNIC-AREA
								813	- FLYING-AREA
								814	- TARGET-RANGE
								900	- FEDERAL-PROP
								901	- STATE-PROP
								902	- COUNTY-PROP
								903	- CTY-TWN-PROP
								904	- SCHOOL-PROP
								905	- CHARITY-PROP
								906	- CHURCH-PROP
								907	- 121A-EX-PROP
								908	- HS-AUTH-PROP
15	VALUE_METHOD	Value Method	Y	LIST	1	Y		A	- ACRES
								E	- BASE-LOT
								F	- FRONT-FOOT
								S	- SQUARE-FOOT
								V	- SOUND-VALUE
20	FRONTAGE	Frontage		NUMERIC	5	Y	Y		
25	DEPTH	Depth		NUMERIC	5	Y	Y		
30	SQUARE_FEET	Square Feet		NUMERIC	7	Y	Y		
35	ACRES	Acres		NUMERIC	9.3	Y	Y		
40	SCENIC_INFL	Scenic Infl		LIST	2	Y		OF	- OCEAN-FRONT
								OV	- OCEAN-VIEW
								BF	- BAY-FRONT
								BV	- BAY-VIEW
								RF	- RIVER-FRONT
								RV	- RIVER-VIEW
								PF	- POND-FRONT

The sample above shows a portion of the Data Dictionary report for the Land table. All Land table fields are listed with the same information found in the Table/Column List screen (field size, ranges, classification lists and so on.)

Unlock Parcel

When trying to access a parcel you may get the message “Row is currently locked, do you wish to view in display only?” This will occur when:

- You are connected to a UNIX or Windows NT system and another user has the parcel on his/her screen.
- The parcel was open when the system crashed unexpectedly.
- The parcel was open when someone did a system shutdown or restart.
- On some PCs, if the system goes into sleep mode, the parcel will be locked when the system restores from hibernation.

If you are on a multi-user system (UNIX or Windows NT) that has not recently crashed, ask the other system users if anyone is using that particular parcel id. If no other user is accessing that parcel, ask your System Administrator to unlock the parcel for you. If your system has recently crashed, notify the System Administrator that the parcel is locked.

If you are on a single user system, unlock the parcel by following the steps below:

- When RPIS asks if you wish to view the parcel in display only, click No.
- On the menu bar, click Utilities > Dbs Maint > Unlock Parcel.



- The list of currently locked parcels will be displayed. Look for the row containing the desired parcel.

Unlock	Locked By	Parcel Year	Parcel ID	Month	Year of Sale	Owner Name
<input type="checkbox"/>	SIGMA	2002	500/001.0-0000-0005.0	0	0	CROKETT DAVID
<input type="checkbox"/>	SIGMA	2002	511/002.0-0000-0061.0	0	0	ALLEN, STEVE

Buttons: OK, Clear All, Cancel

- To unlock a specific parcel, click the box in the “Unlock” column, then click the OK button. The parcel will be unlocked and you will be returned to the main (blank) Utilities screen. To unlock all parcels displayed on the screen, click the Clear All button. (This is particularly useful after a system crash on a multi-user system.)

If you are on a network and other people are using the RPIS system, find out what parcels are being accessed and **DO NOT UNLOCK THE PARCELS IN USE BY OTHER USERS**. Only unlock parcels that are not currently in use.

For training and technical support...

Contact DOR CAMA Technical Support for further assistance or to find out about upcoming training opportunities.

Region	Advisor	Phone	E-mail
Central	Mike Quinlivan	508-792-7300 extension 22313	quinlivanm@dor.state.ma.us
Western	Kirsten Shirer	413-784-1000 extension 20613	shirer@dor.state.ma.us
Eastern	Linda Bradley	617-626-2300 extension 62394	bradleyl@dor.state.ma.us
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