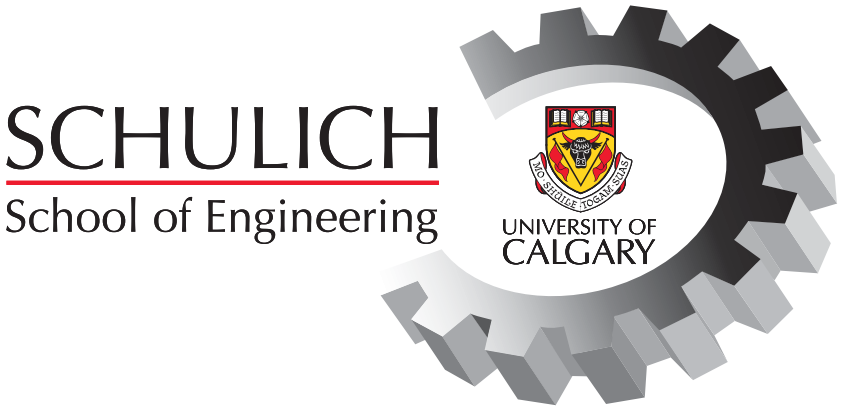

TALKING TITLER MANUAL

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Software Update 14 February 2011

USING THE TALKING TITLER SYSTEM

1. Start by downloading the manual from the webpage. Read the INTRODUCTION thoroughly, and browse through the TUTORIAL.
2. Install the software.
3. Download the tutorial data and work through aspects of the tutorial which are suited to your needs. The tutorial is designed to work through some of the issues in creating land tenure records in uncertain land tenure situations as well as provide instruction on using the software. If you become a regular user, you should adapt this for your own needs and perhaps provide your own data.

Table of Contents

1. INTRODUCTION

Talking Titler is designed as a dynamic, scalable solution to land records, which allows the management of data relating to land tenure such as land surveys and land registration and communal land records. It has limited vector data storage capabilities – it stores coordinates representing land objects and positions of media items such as videos or photographs. In the long term it should be easy to interchange data with various GIS packages.

Object manager is the simplest form of the **Talking Titler** system. It is Windows based and has the minimum number of tables (entities). It is designed as a data management system to handle data stored in the computer as digital files, in database tables and analogue sources such as written documents, maps, diagrams, video tapes, DVDs and CDs. In this form it is a good solution for a small survey practice, a local level registration office or an NGO collecting data on land tenure. It is also ideal as an education and training tool for land registration and other land records systems. It is also very useful as a design and prototyping tool. A major feature is the flexibility it allows in modelling relationships and this should allow potential users to describe their needs and then try them out in a simple model and debate what's needed and what may be superfluous. The prototyping process should also indicate the procedures and quality management functions that should go into a manual of procedures.

Once you have tested the system, you need to write strict procedures on how it should be used. You are strongly advised to work through the tutorial accompanying the system before you start using it.

1.1 MINIMUM SYSTEM REQUIREMENTS:

Computer and processor: 600 megahertz (MHz) processor or higher

Memory: 256 megabyte (MB) RAM or higher

Operating System: MS Windows XP or later

Prerequisite Software: to run the OM application, you need to have Microsoft .Net Framework v2.0 (or higher) and MS-Access. The software installation process will install this on your computer if it is not there already.

You might need to access and work with several multimedia files formats. Therefore you need to have the appropriate multimedia applications to open these files, such as:

Windows Media Player or Real Player or GOM player (free)	*.mp3, *.wav, *.jpeg, *.avi
MS Office	
MS Word	*.doc
MS Excel	*.xls
MS Access	*.mdb
Image viewer software	*.jpg, *.gif

1.2 INSTALLING THE SOFTWARE

1. If you have Talking Titler on your computer, back up the existing database file and all your data files to a different directory, preferably to an external drive. You should do this regularly anyway.
2. Remove all previous versions of the software from your computer. Briefly browse through section 1.3 Setting up the Resource Files before installing.

3. Download the setup file.
   Go to Dr Mike Barry's web page.
   http://www.ucalgary.ca/mikebarry/

Navigate to the Talking Titler page and click downloads in the left-hand column. Save the tt-date.zip file (see footnote[1]) to a suitable directory and keep a note of this directory. You should archive the software version as you may choose to reinstall that version at some stage.

Click on the tt.date.zip file to unzip it. (If nothing happens, you probably need to install a suitable zip/unzip utility. There are a number of freeware versions available.)

Click on the tt.date file to install the software

You should see a screen that looks as follows (note)[2]:

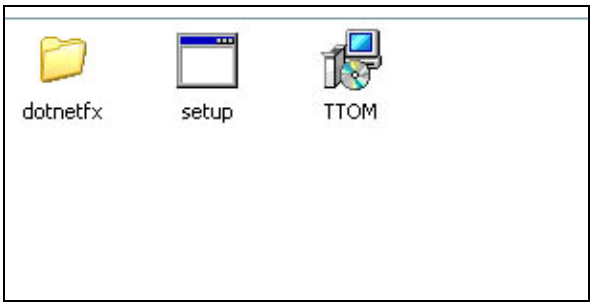


Figure 1.1 Installation Screen

Click on TTOM to start setting up. (Note[3])

4. Next, the "Welcome" dialog will appear (Click on "Next" and follow the instructions). Read the licence agreement, click on "I Agree" to the licence terms, and click "Next".

5. The "Select Installation Folder" dialog appears and provides the default installation folder; the destination folder can be changed now (Click "Next" when done).

[1] e.g. a file that is named tt 11.02.14.1.zip means the version was created on 14 February 2011
[2] If not, in the Window, select view and select icons. This should solve the problem.

[3] If you get an error message, it probably means you have not deinstalled a previous version of Talking Titler.

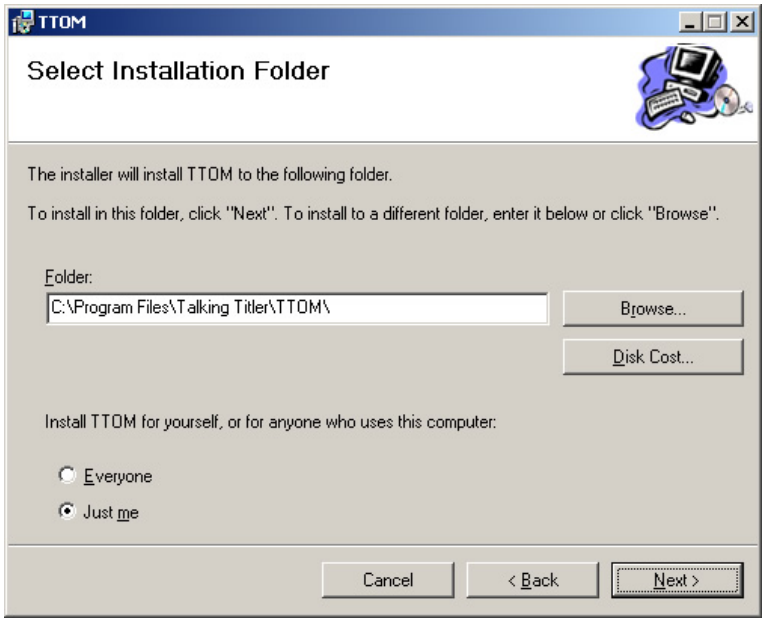


Figure 1.2 Software Directory

6. The "Confirmation Installation" dialog will appear. Click on "Next" to proceed with the actual installation.

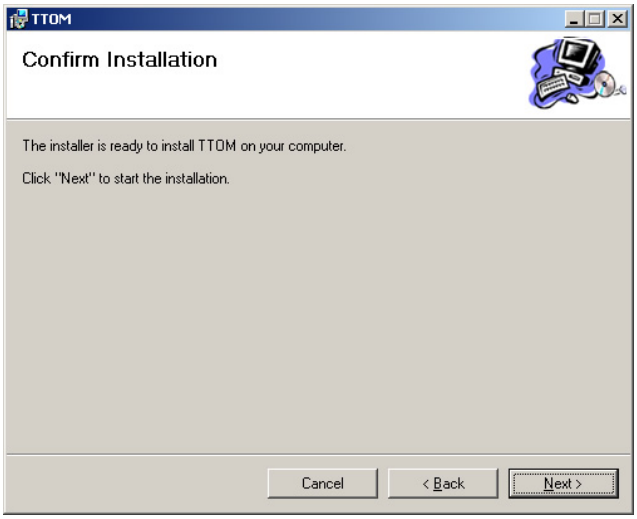


Figure 1.3 Confirm Installation

7. Before you complete the installation, the folders to store the database and the project files are needed. These folders are required in the "Special Folders Configuration" dialog. If you have a look at the screen below.
   Line 1 In the first line of the box, you provide a name for the database e.g. Almondville.mdb. (This is the tutorial file name)
   Line 2: In line 2 you select a folder where the database will be located. For organisational purposes and convenience it is recommended that you store the database file in a folder separate to your data files.
   Line 3: Select a Project Data folder for your data files for a particular project. Provide the required folders and a name for the database. Use the "Browse" button to locate them. When done click on "Next". (Note you can use different databases and different data directories for different projects and switch between them – See the "Configuration" menu item once you have installed the software. If you haven't used Talking Titler before, you should work through the tutorial and use the names we have given you).

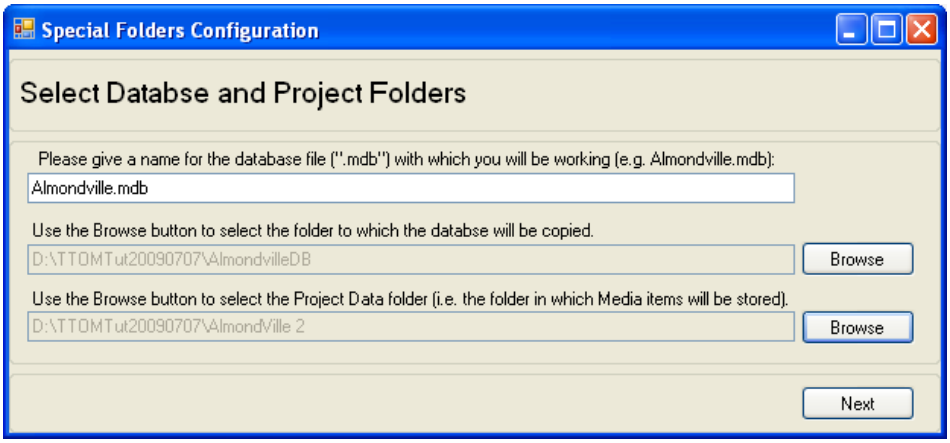


Figure 1.4 Select Database Name & Folder and the Data Folder

8. When the installation is finished, the "Installation Complete" dialog will appear. The installation is now done, click on "Close" and you can start using the Talking Titler System. There should be an Talking Titler Icon on your main windows screen.

1.3 SETTING UP THE RESOURCE FILES

1. Create a directory for the data files. You should use different directories for different projects. E.g. if we have one local project called Almondville, we'll create a directory for it. If we have another directory called Walnutville, we'd create a separate directory for that. Talking Titler examines the parent directory and will find data files in the sub-directories automatically.

   D:\ Project_Name \ Instruments

   For our purposes we are going to use a project named Almondville.

2. Ensure that
   - you know the type of data you are going to store before you complete the next step
   - and that you have established file naming conventions for the different type of data files. See Appendix A.

3. Create sub-directories for the different types of data.
   Example: You may want to store data according to media type, in which case you might create a set of subdirectories:

   D:\Almondville\Instruments\Photographs
   D:\Almondville\Instruments\Survey Plans
   D:\Almondville\Instruments\Titles
   D:\Almondville\Instruments\Videos

> **TIP** You may choose any organisational system you wish to store the data provided it falls is within the main directory you have chosen i.e. D:\Almondville\Instruments.
> Example: Some users file data by person e.g. an applicant in a land regularization scheme.

4. Test the software and design your file naming schema.

> ! **TIP** Decide on a standard file naming convention for the different types of files before you start using the file.
> See appendix A to this manual.

5. Click on the Talking Titler icon on your main screen to run the software.
   - In the top-most menu in Talking Titler, have a look at the *Configuration* menu.
   -Look at configure look up tables;
   -Work out how to add an item to the Look Up Tables to suit your specific needs. The items entered in the Look Up Tables will appear in drop down menus in the program.
   - Look at *Configure Project Folder Location*.
   - Look at *Select Database File*.

1.4 DESIGN PROCEDURES

At the end of this section you may have the following protocols:

- Steps to access project
- Steps to enter data
- Standards for entry of data
- Backup protocols

1. Once you have familiarized yourself with the software, go and work through the DESIGNING A PROJECT section.

   Write down a formal set of steps for people to use the software. Ideally personnel who enter data should have done the tutorial first. You need a procedure to enter the data and create the relationships.

   You also need to standardise the descriptions in each field. It is advisable to create a MS-word document with a standard description. It is important that the first line of the description should be a summary of the data entry. The following is a standardised description suggested for Lagos State:

   > Line 1: RegularisationFileNo; Applicant name; Survey Plan Number; Date; Media Type *(the last item may be unique to each data entry)*.
   >
   > Lines 2 onwards: Free form description of information relevant to the application

2. Write down a procedure for backing up the software.

   You should back up and archive the Almondville.mdb file, or the name you have assigned to your database files, and your raw data files on a regular basis. E.g. you should back up weekly and archive monthly. Can you recover from a major disk crash or a virus infection on your computer? Have archives of data and the database file (Almondville.mdb) for every month going back at least a year, preferably two years. You should also back up and archive every time you install a new software update.

2. TUTORIAL: TALKING TITLER OBJECT MANAGER

2.1 INTRODUCTION

The following is a tutorial to help you understand the TTOM software and the processes that it supports. It should be viewed as a means to develop a participatory design approach to land records which can incorporate a range of tenure systems.

You should put all preconceived ideas of how a particular system works, or should work, and all the instruments and the laws with which you are familiar behind you. The objective is to examine how the software works, how we can document land tenure and a range of other issues relating to land. Hopefully we may generate some new ideas which may help in improving existing systems in your region.

Let's start with a fictitious land titling project in Almondville. Note that photographs and other media items have been taken in a variety of places and every effort has been made to hide the identity of individuals.

The tutorial is best run in groups. Have marker pens, white boards and pieces of paper available. Draw the relationships between the data items as you go along. Discuss the relevant issues. Use the exercise to examine different alternative methods of recording rights in land. What are the objectives of recording rights? How would you see this contributing to social and political stability and perhaps economic development?

You Need:

1. A computer with the System Requirements described in section 1. (see section Minimum System Requirements).
2. Pieces of paper and different colour marker pens
3. Flip charts or white boards / chalk boards

2.2 CREATE DATA DIRECTORIES

> **NOTE** In the current software version, we can only run one project at a time in a particular directory.

1. On your hard disk, create a directory TTOMTut (**T**alking **T**itler **O**bject **M**anager **tut**orial)
   e.g. D:\TTOMTut

2. Create a subdirectory called Media_Tut1. Let's say we created your subdirectory on the D: drive of your hard disk. Your directory tree should look as follows:
   D:\TTOMTut\Media_Tut1

3. Install the Talking Title software (see section 1.2 "Installing the Software" for detailed instructions).

4. We have some data files for this tutorial in a file Media_Tut1.zip. Unzip the files and extract them into the Media_Tut1 directory.

5. We are going to work with a fictitious project called Almondville. Create a subdirectory of :\TTOMTut called Almondville and another called Almondville Database. Your directory tree should look similar to the following:
   D:\TTOMTut\Almondville
   D:\TTOMTut\Almondville Database

6. Create the subdirectories of Almondville called Videos & Audios, Survey Plans, Photographs, TitleDeeds, and Text Documents. Your Almondville Directory tree should look as follows:

   :\ TTOMTut\Almondville\Photographs
   :\ TTOMTut\Almondville\Survey Plans
   :\ TTOMTut\Almondville\Text Documents
   :\ TTOMTut\Almondville\TitleDeeds
   :\ TTOMTut\Almondville\Videos & Audios

7. From the D:\TTOMTut\Media_Tut1directory:

    a. Copy all the files prefixed with PH_ to the directory :\TTOMTut\Almondville\Photographs
    b. Copy all the files prefixed with SP_ to the directory :\TTOMTut\Almondville\Survey Plans
    c. Copy all the files prefixed with GEN_ to the directory :\TTOMTut\Almondville\Text Documents
    d. Copy all the files prefixed with a T_ to the directory :\TTOMTut\Almondville\TitleDeeds
    e. Copy all the files prefixed with a V_ and AU_ to the directory :\TTOMTut\Almondville\Videos & Audios

You may delete the D:\TTOMTut\Media_Tut1 directory and all its data once this is complete.

Note these videos, audio files and photographs are not to be distributed or passed on to third parties.

2.3 SELECT THE DATA DIRECTORY

Identify where the project folder is located by doing the following:

1. Run the OM software
2. Click on the *Configuration* menu item on the top menu
3. Select *Configure Database File Location*
4. Navigate to :\TTOMTut\Almondville Database or the location where you have stored the Almondville.mdb file
5. Next, click on *Configure Project Folder Location*
6. Navigate to the folder which includes the data files:
   :\TTOMTut\Almondville
7. Select *Save*

Note the software will find the files in the sub-directories.

NOTE If the database has data in it already, we need to delete this for the tutorial. Remember to backup this data if it is important data.

1. Close OM software
2. In the \The OM subdirectory, open the file OM.Mdb, the MS-Access file, by clicking on it or opening it in MS-Access
3. Open the table *relMediaMedia*

Click on *Edit*; select *All Records*, and then in the *Edit* sub-menu delete all records
Do the same for all the tables prefixed with "rel"
4. Now delete the records in the table *tblSpatialPoint* (This table must be deleted first). And then do the same for the rest of the other tables prefixed with "tbl"

!

Do not delete the tables themselves.
Do not delete the data in the "lut" (look up) tables. You probably need them!

2.4 UNDERSTANDING DATA IN THE SYSTEM

DISCUSSION A: DATA ORGANISATION AND FILE NAMING CONVENTIONS

Open some of the data files and examine them. What have you noticed about the directory structure and the file names? Is there a way we can improve this system?

DISCUSSION B: MENUS AND DATA ORGANISATION

Have a look at the top or main menu. What are the main objects or things we use in a land records system? The menu items should give you a hint.

PART 1 BOUNDARY CONFLICT RESOLUTION

In the year 2006, the Almondville community becomes involved in a dispute with the adjoining Cedarville community. The Land Tribunal Officer arranges to mediate the dispute in the field. A large number of people gathers to participate in the process and witness the proceedings. We go along to record the events. We use video to capture as much as we can. However, we cannot record everything and so we ask the mediator to use a digital audio recorder to record parts of the proceedings, which would fill in any gaps that we have in the video record.

As the boundary line is agreed on, so members of the two communities cut the agreed line. At points where the line changes direction, concrete conical monuments are constructed. Surveyors from the Surveyor General's office take photographs of these monuments and record their positions using a hand held GPS.

We record the following in our notes about the audio and video files.

Field Notes Page 1

Video and Audio File Field Notes	
File name	**Description**
V_20060812 Almondville_Cedarville dispute	*Date:* 12 August 2006 *File Type:* Video *Camera Operator*: Mike Barry *Interviewer:* Mike Barry *Persons in Video:* Mr Ali Khan *Role:* State Security Advisor Mr John Doe *Role:* Traditional Leader Almondville Mr Sifiso Mbeti *Role:* Traditional Leader Cedarville (many more not mentioned as this is a tutorial) *Position Data:* Not recorded – see photographs of monuments. *Description of Content* Ali Khan mediates the dispute between the two customary authorities. Mr John Doe leads testimony from the Almondville representatives and Sifiso Mbeti from Cedarville. The discussion moves around from the parking lot to the boundary line in dispute. Eventually the discussion group reaches the point on the cut line where the boundary is still in dispute. A long discussion follows about how to proceed. Eventually there is an agreement on a give and take line in a particular direction.
AU_2006_08_18 Almondvillle_Cedarville dispute	*Date:* 12 August 2006 *File Type:* MP3 audio file *Recorder Operator*: Ali Khan *Interviewer:* No formal interviews *Persons in Audio File:* Same as V_20060812 Almondville_Cedarville dispute *Position Data:* V_20060812 Almondville_Cedarville dispute *Description of Content* V_20060812 Almondville_Cedarville dispute

Note these videos, audio files and photographs are not to be distributed or passed on to third parties.

There are a number of people who provided evidence in the video. Normally we would put all their names in the file. For the sake of brevity, we'll only put three names in the database. (This is only an exercise!).

Field Notes Page 2

Last Name	First Name	Date of Birth	National ID	M/F	Relationships and other Facts
Doe	John	1940/02/27	1940022705	M	Traditional Leader, Almondville
Mbeti	Sifiso	1951/0315	19510315651	M	Traditional Leader Cedarville
Khan	Ali	1960/05/30	19600530538		State Security Advisor responsible for mediating boundary conflicts between customary authorities.

Let's enter our first data….

First we need to set out media types in the Look Up tables.

1. Run OM software.

   Configuring Look Up Tables
2. Click on the *Configuration* menu item on the top menu.
3. Select *Configure look up tables*
4. Select *Media Types*

> **!** Delete any media types that should not be in this look up table. You must do this now before you start using the table.

5. If these are not in the look up table, add **Audio File, Digital Photograph, Scanned Document, Survey Plan, Video** and **Written Document** using the *Add New* button. Save changes and exit.

   Adding Video Records
6. Select *Media* in the tab menu (the menu just below the statement "Hint: right click on a record for further functionality")

7. Delete any existing records
8. Select *Add New Media*
9. Select *Video* from the *Media Type* drop down list
10. Click on *Get Media File* and navigate to the file
    V_20060812 Almondville_Cedarville dispute
    and select it
11. Click on *Show Media* to make sure you have selected the correct file. (A video of a group of Nigerian men in the field should display).

Add the Video Metadata

12. Use the date function and select *12 August 2006* in the *Issue Date* field

> The *Issue Date* field requires some explanation. Click on the field, then in the data input line, double click on the year, and enter 2006. Then click on the month and enter 08 in the highlighted section. Note that the month is changed to August.
>
> Select the day of the month from the drop down calendar list. Repeat this process for all the media files you enter in the database.

13. *Physical Location*: We will not use this in this exercise, but in the case where the video is not stored in the \Almondville\Video directory, it may be stored in a file or in cabinet of video files. You would type the name where you have stored the video in this section. Likewise you would do this for paper documents stored in a file.

> The *Physical Location* tells us where the data are stored. For example, they may be stored on a hard disk, a computer, an external hard disk drive or as a physical paper file.

14. *Provide URL:* We will not use this in this exercise, but perhaps you have a video stored on the internet or somewhere else on your computer other than the project file. You can point to the video file (or any other type of digital file) by using a URL.
15. Create a MS Word or similar word processor file of the description data in the table above. (Better to create type up the field notes in word processor during data capture or at the end of the day's data collection!)
16. Copy the description data into the *Description* field
17. Click on *Save this Record and Add More*

Adding Audio Records

18. Select *Audio File* from the *Media Type* drop down list.
19. Click on *Get Media* and navigate to the file
    AU_20060812 Almondville_Cedarville dispute
    and select it (note this audio file and the video file are actually from two different projects).

20. Repeat steps 11 – 15 for other media files.
21. Click on *Save this Record and Close*.

Now let's relate these two media files …..

Relating Media Files

21. Right click on the Video record *V_20060812 Almondville_Cedarville dispute* and select *Relate this Media with …* and select *Another Media.*
22. Select the Audio File for *AU_20060812 Almondville_Cedarville dispute*
23. Type "Audio file augments the video record" in the *Description* field.
24. Copy the *Description of Content* from the *V_20060812 Almondville_Cedarville dispute* below this
25. Select *Relate* and the system returns to the main screen.

Viewing Relations

26. In the main screen, on the top right of your screen, click *Relations* and on the menu on the bottom split screen, select *Media to Another Media File*.
27. Select the video record in the top screen (Media Details). Examine the relation in the top and bottom screen.
28. Now select the audio record in the top screen, and examine the relation.
29. Play with the top screen data; e.g. play the media files by right clicking on the record and select *Show/Play Media*. Likewise, select a record on the bottom half of the screen and select *Show Media Item.*

Now let's enter the data relating to the people in the video

Adding Persons

30. On the tab menu, click on *Person*. Select *Add New person* at the top right of the screen.
31. Enter the data relating to the three people above.

Adding Person – Media Relations

32. Now relate each of these three people to the video and the sound file. Question: What should we put in the description field to describe the relationship?
33. Select *Relations* (top right of the screen) and view the *Person to Media* relationships for each person.
34. Select *Media* in the main menu, and view the *Media to Person* relationships and the *Media to Media* relationships.

Photographs and coordinates

A surveyor constructed boundary beacons and took photographs and GPS fixes as the dispute was being resolved.

Let's enter the data for the photographs described on Field Notes Page 3 and the beacons of which they provide evidence.

Field Notes Page 3

Photograph	Date	Description
PH_20060812 Almondville_Cedarville Beacon_17	2006.08.12	Object: Beacon 17 Almondville_Cedarville boundary Concrete pyramid placed Date: 2006.08.12 Surveyor / Photographer: Running Wolf Hand Held GPS Fix Units D.M.S. Latitude: 34.00.00.0000 North Longitude 50.00.00.0000 West
PH_20060812 Almondville_Cedarville beacon_19	2006.08.12	Object: Beacon 19 Almondville_Cedarville boundary Concrete pyramid placed Date: 2006.08.12 Surveyor / Photographer: Running Wolf Hand Held GPS Fix Units D.M.S. Latitude: 34.00.02.0000 North Longitude 50.00.03.0000 West

Adding Photos

35. Select *Media* from the tab menu; select *Add New Media*
36. Add the details for the two photographs above
37. Now select *Person* and add Running Wolf as a person. Put "Surveyor General's office" in the address field. Add Photographer / Surveyor in his description field.
38. Relate Running Wolf to these two media using "Surveyor / Photographer: Running Wolf" to describe the relationship.

Adding Land or Property Objects

39. Select *Configuration* in the top menu. Select *Configure Look Up Tables* and then *Property Types.* If *Boundary Monument* is not in the look up list, select *Add New* and add this.
40. Now select *Land \Property Object* from the main menu. Select *Add New Property*
41. Enter *Beacon 17* as the first object. Enter the details for it. ID is *Beacon 17*. Property type is *Boundary Monument*. Description is *Concrete Pyramid.* Select *Save This Record and Close* on the data input form.

    Ignore the following for the mean time.
42. Add it's coordinates to the coordinate file. Right click on the Beacon 17 record. Select *Add/Modify Geometry*.
43. In the Geometry Look Up Table, select *Point.*
44. Click on *Add new Geometry.*
45. Right Click on the Record *and select Add/ModifyView Spatial Points.*
46. For Ellipsoid type WGS84
47. For Origin type GRS 80
48. Under name specify Beacon 17.
49. For the X (Easting) Coordinate input: 50.00.00.0000 West
50. For the Y (Northing) Coordinate input: 34.00.00.0000 North
51. Click *Save*

52. Relate Beacon 17 to photograph *PH_20060812 Almondville_Cedarville Beacon_17.*
53. Repeat steps 39 – 51 for Beacon 19

PART 2 CENSUS AND EXPECTED PROPERTY RIGHTS

To reduce internal conflicts over land in the Almondville community, we need to document existing rights and expected rights. We also need to ensure that we can show the relationships between the people in Almondville and the land.

We first need to know how many people live in each house, what their relationships to each other are and then their relationships to land objects e.g. houses, trees, fields.

House Number 72 and its People

We start off with a census type survey of the community. Who lives here? What are the relationships between them? Do they have a right to live on the land? If so, how does the land tenure system work? How does inheritance work here if a person dies without a will? We limit our exercise to house number 72 and its occupants.

As a start we collect census data relating to five people and we photograph them in front of house number 72.
The person at the forefront of the photo is John Doe. We record his details in Field sheets 6.

At house number 72, on our census form we note the following:

Field Sheets 4 Property Object

Property ID	**Address**
House Number 72	Street Address: 72 Nutty Street, Almondville

Field Sheets 5 Photographs

File name	**Description**
PH_2009_06_10 (1)	John Doe, Gladys Brown, Children Mavis, Ellen and Peter Brown in front of house 72
PH_2009_06_10 (2)	House 72, rear view.
Ph_2009_06_10 (3)	Rice Field for the use of John Doe and family, or perhaps for occupants of House 72. Details not clear.
Ph_2009_02_02_Qkbrd	Quickbird satellite image of Almondville settlement.

Field Sheets 6 People Living in the House

Last Name	First Name	Date of Birth	National ID	M/F	Relationships and other facts
Doe	John	1940/02/27	1940022705	M	Traditional Leader,Almondville Head of House and de facto owner. Widower. Wife died two years ago. He has three children and 15 grandchildren. He lives in house number 72 with his daughter, her husband and her three children. The daughter's husband was away at the time of the visit.
Brown	Gladys	1980/07/15	1980071509	F	John Doe's daughter. Married to Arthur Brown. Expects to inherit house from John Doe.
Brown	Arthur	1978/06/21	Not known	M	Absent. Married to Gladys Brown. Employed in Manilla. Returns to Almondville over weekends. Comes from Coffee town.
Brown	Mavis	2006/11/11		F	Daughter of Arthur and Gladys Brown
Brown	Ellen	1999/12/26		F	Daughter of Arthur and Gladys Brown
Brown	Peter	1997/01/07		M	Son of Arthur and Gladys Brown

John Doe has appeared in two videos for us and we did an audio recording of him.

Field Sheets 7 Video and Audio File Field Notes
Note these videos are not to be distributed or passed on to third parties.

File name	Description
V_2009_06_10 JohnDoe (1)	*Date:* 12 June 2009 *File Type:* Video *Camera Operator*: Mike Barry *Interviewer:* Mike Barry *Persons in Video:* Mr John Doe *Role:* Traditional Leader Almondville *Position Data:* Not recorded *Description of Content* John Doe appears in front of his house and tells us his life history, how he came to acquire the house through his parents, and how they came to acquire it. He mentions an elder brother David Doe who left the village some 35 years ago and with whom people have had no contact since. He tells us who he expects to inherit the house and what he expects will happen to their siblings once this happens. He also mentions that he has a personal loan, an IOU, with Manie Slovo using house as guarantee. Manie Slovo has the written piece of paper reflecting this, but we cannot trace him. Somehow we need to show this as an encumbrance on the property if we choose to title it in future. However, we have no hard data. So later at the end of the day we decide that we don't have enough data in the video interview, so rather than set up a further video – which will take up unnecessary file space - we quickly get John Doe to give us a detailed sound bite on this issue as we did not get the compete picture on the video.

V_2009_06_10 JohnDoe (2)	*Date:* 12 June 2009 *File Type:* Video *Camera Operator*: Mike Barry *Interviewer:* Mike Barry *Persons in Video:* Mr John Doe *Role:* Traditional Leader Almondville *Position Data:* Not recorded *Description of Content* John Doe has a field where he grows subsistence crops. He describes the boundaries and who has crops adjacent to his fields.
AU_2009_06_10 JohnDoe(1)	*Date:* 12 June 2009 *File Type:* Audio *Camera Operator*: Mike Barry *Interviewer:* Mike Barry *Persons in Video:* Mr John Doe *Role:* Traditional Leader Almondville *Position Data:* Not recorded *Description of Content* Sound file describing an IOU by John Doe to Manie Slovo with details of the transaction. The house Number 72 is encumbered by this debt as is John Doe in his personal capacity.

Let's enter the data relating to the above:

Adding Land or Property Object

1. Click on *Land\Property Object* on the tab menu.
2. Click *Add New Property* on the top right of the screen
3. Input 72 for the *Property ID*, and select *House* from the *Property Type* drop down menu.
4. Add the Street Address in the *Address* field
5. Type "The Chief's House" in the *Description* field.

> **Discussion:**
> Have a look at the "Extinguished" check box. Why would we want to "extinguish" a property object?
>
> We would close this record if the object no longer exists. For example, a tree is cut down, a parcel is consolidated with another parcel or is subdivided into a number of lots where there is no remainder, a servitude is cancelled or a lease expires.
>
> Can you think of any more examples where we might want to close a record?

6. Click *Save this Record and Close*.

Viewing Records

7. Right click on the record in the table. Have a look at the various options. Click on each of these options, examine what happens, and then close the option.

    - To what/whom can we relate the property object?
    - Try and relate House 72 to another object by clicking on one or more of Person, Reference Item, Media or another Property Object. What happens?
    - As you can see we can edit and delete the record; we cannot delete it once a relationship has been created with another object though.
    - Click on the *Add/Modify Geometry* option. Have a look at what we should do as part of entering coordinates to represent a property object.

8. Click on the *Relations* button. What happens?
9. Try to relate House 72 with another object. Can you do this?

We have now entered the basic data for House 72. As you can see, the drop down menu also allows other type of Land\Property Object such as a *Parcel*. What other objects do you think we could add in here?

Adding Relations

10. On the tab menu, Click on *Person*. Select John Doe's record. Modify it by adding the additional description data in Field Sheets 7 "People Living in the House" and putting House 72 as his address.
11. Select *Add New person*. Add the details for all the people listed in the table above. Note that the fields in red with a * next to them are essential fields. The *Title* field entry must be selected from the drop down list; i.e. click in the down arrow at the end of the field.
12. Copy the relationship descriptions into the Description field.
13. Click *Add New* or *Add New and Close* to complete the record entry in each case.
14. Have a look at the *Description* field in the table. Each time a change to the record is effected, a note of the change will appear in the *Description* field.

Now let's start trying to model the relationships between the different people.

15. Highlight the John Doe record. Click the *Relations* button and examine the screen. Right click on the John Doe record. Choose to relate the record with another person.
16. Choose the particular record and the type of relationship. Describe the relationship if necessary. E.g. Gladys Brown is John Doe's daughter and expects to inherit.

> **Discussion:**
> Are the relationships properly created? What are the strengths and weaknesses of the software design in the manner relationships are managed? Do we have enough relationships specified in the Relationship Type look-up table? Too many?

17. Enter the media and their details.
18. Relate the media files to each other.

> **Discussion:**
> Which media files should we relate and why should we relate them?

Relate the different items to create a proper land records system.

19. Select *Land/Property Object* and highlight the record for House 72. To which persons and to which media items should we relate this? Populate the database (i.e. create the relations) and discuss.

20. Select *Person* from the tab menu and create the relationships between people and the media items. What do we do about Manie Slovo and John Doe's debt to him?

Discussion:
The primary things (objects) we have to store in the records are people and land/property objects and the relationships between them. Thus the media items "serve" these other two objects. In which situations might the system we have used so far be useful? What other objects might we want in the system and in what situation?

Part 3 Formalisation / Regularisation of Almondville

Several years and pass and the community decides they want to formalize their land. The first item needed is a survey plan of the outside figure of the settlement. Lot holders choose to survey their lots as and when they want to register their land.

A surveyor Jack Jacobs surveys the outside figure being Lot 1 Almondville as a land grant and creates a survey plan SP_2015_4567.

Jacobs lodges his survey with the Surveyor General who assigns the above survey plan number and stores the survey record as SR_2015_100.

This plan then gets registered under a 25 year lease / purchase by instalments scheme as T_A_2015_4376 in the name of the Almondville Community Trust. (The surveyor General endorses this number on the survey plan).

In the same survey, SR_2015_100, Jacobs creates lot 2 and lot 3, which are portions of lot 1. Lot 2 is assigned Survey Plan number SP_2015_4568, and lot 3 SP_2015_4569. These two subdivisions create a 10 metre wide road to the south of them.

The Surveyor General "sketches" the subdivisions on the parent Survey Plan of Lot 1 which is assigned an update number SP_2015_4567_1 to denote the changes made as a consequence of the subdivisions made in the survey SR_2015_100.

Lot 2 is transferred to John Doe by deed T_A_2015_4377. Lot 2 includes House 72.

Lot 3 is transferred to Clare Habermas, John Doe's sister, by deed T_A_2015_4378.

In 2017, Manie Slovo claims he owns the property, as John Doe did not repay his debt, and we go to a community tribunal. We need to get all the evidence related to the adjudication and titling of the property to assess the evidence.

In the same year, John Doe's long lost brother challenges John Doe's ownership.

In 2020, Clare Habermas dies and lot 3 becomes the property of John Doe's family through inheritance.

Land Surveyor Jack Jacobs prepares survey plan SP_2015_567 consolidating the two lots.

Deed T_A_2020_111 transfers lot 3 to John Doe and family

Deed T_A_2020_112 consolidates lots 2 and 3 held by John Doe and family

Discussion:
How do we deal with these various transactions and claims?
How do we query our database to extract the relevant information in the event of a claim?
Do we have sufficient data to deal with Manie Slovo's claim and John Doe's brother's claim?
Can we ever have enough information to deal with such claims?

Data Entry

1. Have a look at the Survey Plan SP_2015_4567 and the rest of the Survey Plans (you may use the term diagram rather than survey plan).

   What is the chain of subdivisions and consolidations that has taken place?

   Enter all the survey plans as media items and their Lot numbers as Land\Property objects. Enter the Survey Plans as media items in the following order:

Plan	Lot Number / Object
SP_2015_4567	Lot 1 Almondville, outside figure of settlement.
SP_2015_4568	Lot 2, portion of Lot 1, Almondville
SP_2015_4569	Lot 3, portion of Lot 1, Almondville
SP_2015_4567/1	Endorsed to show subdivision of lot 1 creating lots 2 and 3
SP_2020_567	Lot 4 comprising consolidation of lots 2 and 3 into lot 4 Almondville
SP_2015_4568/1	Cancelled as included in consolidation Lot 4
SP_2015_4569/1	Cancelled as included in consolidation Lot 4
SP_2015_4567/2	Endorsed to show consolidation of lots 2 and 3 into lot 4 Almondville

   Why should we choose this order of entry?

2. Enter the lot numbers as *Land\Property* objects and then relate them to the survey plans.

3. What happens to house 72 now? To what should this be related, if anything?

4. Mark the relevant Survey Plans as *Superceded* and Lot Numbers as *Extinguished* if they are no longer the current document or the lot has disappeared through consolidation or subdivisions which leave no remainder.

5. What should we do with the Survey Record numbers assigned by the Surveyor General of Almondville (Community Surveyor General?).

Record Number	Lots Created	Survey Plans	Surveyors
SR_2015_100	Creates Lots 1,2,3	SP_2015_4567, SP_2015_4568, SP_2015_4569	Jack Jacobs

We enter SR_2015_100 as a reference item and relate it to the lots created in the survey and the media items created in the survey. Relate Jack Jacobs to the Survey Record too.

6. Create Jack Jacobs as a person, describe him as a Land Surveyor in the description field, and relate the Survey Record and the Survey Plans to him. (E.g. Created plans SP_2015_4567, SP_2015_4568, SP_2015_4569 by Survey SR_2015_100).

Title Deeds

There are different ways of registering land. We will use a deeds or improved deeds system, where documents are generated on a word processor. We can easily use a title based system where every document is stored individually and linked via a relation. Open the deeds/titles in MS-Word and browse through the different sections of them. Have a look at how they are constructed. Could we use the software to manage these?

Enter and relate the following data.

Title Deed	**Lawyer**	**Lots**	**People**	**Survey Plan**	**Tenure / Restriction**
T_A_2015_4376	Catherine Joan Renaulds	1	Almondville Community Trust	SP_2015_4567	25 year lease
T_A_2015_4377	Catherine Joan Renaulds	2	John Doe	SP_2015_4568	25 year lease
T_A_2015_4378	Catherine Joan Renaulds	3	Clare Habermas	SP_2015_4569	25 year lease

7. Open Deed T_A_2015_4376 first and enter it as a new *Reference File*. Discuss and then do the following: Cut and paste what you think is the relevant text in the deed to the *Description* field. Repeat this for all the deeds.

8. Enter the person details for the lawyers.
9. If their details are not in the database already, enter the details of the people.
10. We do not need to enter the Tenure type as it is in the descriptions.

11. Link the reference instruments to the relevant people, land objects and survey plans.
12. Once all the data are entered and you feel that the data are accurate, close the Reference Instruments. Right click on the record and select *Mark as Closed*. This is equivalent to registering them. They now cannot be altered.

13. Try to retrieve data which will give us information about the following:

    In 2017, Manie Slovo claims he owns the property (lot 1 and house 72), as John Doe did not repay his debt, and we go to a community tribunal. We need to get all the evidence related to the adjudication and titling of the property to assess the evidence.

    In the same year, John Doe's long lost brother challenges John Doe's ownership.

    Discussion:
    Did we enter either of these two claimants as people?
    If we look at the relationships which we have entered against John Doe, can we track the data which will get us the necessary evidence?
    What should we do in future?
    What are the limitations of any land tenure information system?

14. Enter the details relating to the following:

    In 2020, Clare Habermas dies and lot 3 becomes the property of John Doe's family through inheritance.

    Land Surveyor Jack Jacobs prepares survey plan SP_2020_567 consolidating the two lots.

    Deed T_A_2020_111 transfers lot 3 to John Doe and family

    Deed T_A_2020_112 consolidates lots 2 and 3 held by John Doe and family

Discussion:

1. How do we use the above exercises to design a land records system that can include both customary land tenure data and surveyed and registered land data? Discuss this is general terms, not your own local situation.

2. How can you use this to develop an integrated Land information System in your local situation?

3. Design a land information system and a tutorial for one of the following:

    a. A land information system in a land professional's office (your own office)
    b. A micro-finance system for housing
    c. A mortgage system for housing
    d. A local level surveyor general's office
    e. A land regularisation system

3 DESIGNING A PROJECT

There are a range of applications and a mix of applications for which The Talking Titler software can be used as an administrative tool. It is critical that you prepare a rigorous design for the system and write down proper procedures for using the system. The system allows a great deal of flexibility; flexibility which will allow you to create a complete mess if you're not careful! Therefore, it is vital that procedures and rules are properly documented.

STEP 1: List Entities

Let's first list the various references, or entities, we might be interested in such as the following:

Persons

A person may be a client; more than one person may be the client
A person may be a landholder; more than one person may be the holder
A person may be claiming a right in land
A person may be a neighbour to one of the parcels being surveyed
A person may be a partial rights holder (e.g. mineral rights holder, mineral lease holder, right-of-way holder, usufruct holder)
A person may be a company or a trust or similar business entity
A person may be a government department
A person may be the holder of partial rights in a parcel (e.g. servitude (easement) or lease)
A person may be related to another person (e.g. parent – child, cousin etc, clan, sub-clan, lineage group) which gives them a right in land
A person has an identity document, an address and possibly a photograph (media)
A person may appear in many media items

Possible Reference Entities

You should choose one of the following as the reference entity. If the others in this list appear in your database, they should be listed as media.

Underlying Titles and/or Deeds

Partial Rights (e.g. Servitudes, Easements, Right of Way, Lease, Usufruct, profit a Prendre) and documents (e.g. title instrument) which define them

Property File

Rent Card

Occupation Permit

Parcel Number (possible reference if parcel based information system as opposed to property ownership reference)

Object Number (e.g. shack number, house number)

Possible Media Entities

Survey

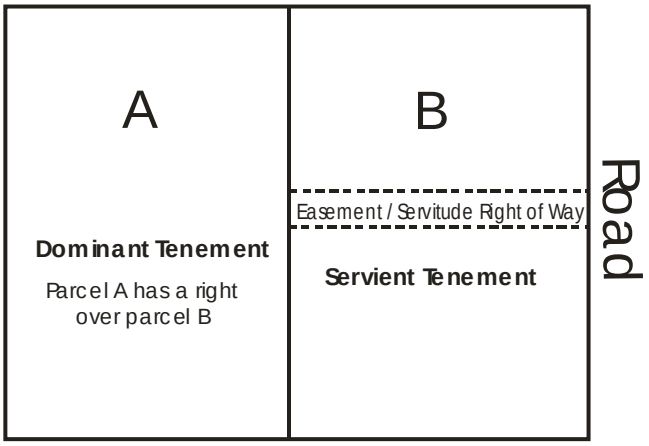
A survey will have a survey record number; either from the Surveyor General or an in house reference number e.g. SR_2009_1234. We may wish to break the survey down into its components

Survey Plans / Diagrams – legal documents created in the survey

Parcels

Parcels may be those that are being surveyed or affected by a survey

A parcel can have a real right over another parcel. E.g. a servitude / easement can be in favour of parcel A over parcel B.



A 3-d Object of Land Rights such as a strata space, section or condominium unit, house or a shack

Physical Feature

A physical feature will probably be something like a power line, a river, a tree, a building or a part of a building (e.g. an apartment or garage).

A physical feature may be represented on a Survey Plan / diagram or other media form

Vegetable Garden

Maps e.g. 1:50,000 sheets incorporating the area under survey

Cadastral Information System Plan – government maps of cadastral boundaries and other cadastral information

Geodetic Control Coordinate File

Satellite Images

Topographic Plan / DTM file of area under survey

Aerial Photographs

Survey Records from previous surveys which have a bearing on the current survey

Photographs of evidence which may be relevant to current survey and to other surveys

Videos of evidence which may be relevant to current survey and to other surveys. It may also be evidence relating to objects, persons and for general historical evidence.

Audio / Sound File

SAR files

LIDAR files

Geophysical survey data

GIS Coverages

Cadastral Information System Plan – government maps of cadastral boundaries and other cadastral information

Written documents

STEP 2: DEVELOP QUESTIONS YOU MIGHT ASK OF THE SYSTEM

- What is the Survey Record Number?
- Is there a reference to a statutory consent (e.g. Subdivision Approval)
- Which parcels are directly affected by this survey?
- Which Cadastral Information Plans underlie the area of interest?
- Which existing survey plans do I need to examine (e.g. neighbouring parcels, partial rights)
- Which previous surveys (Survey Record Numbers) do I need to examine and reference as part of the survey process (recursive relationship)
- Which topographic maps (e.g. 1:50,000 sheet) underlies this survey?
- Which Surveys are fall within the borders of a particular map sheet (How many of the reference entities are contained in one of the media?)

- Which people are affected by the survey?
- Which people have registered or recorded rights over a parcel or object?
- Which people are claiming a particular parcel?
- Who are the clients?
- Do they have representatives and sub-contractors?
- What other relationships between people are relevant to the survey?
- What are the interpersonal relationships in this population that may give rise to land rights or expectations of land rights?
- Which people are affected by the process; who are the stakeholders and other role players? What is their interest?

- What are the Titles / Deeds affecting the survey?
- What partial right titles / deeds affect the survey?
- Which people lay claim to these?
- What are the Survey Plans that are being generated by this survey?
- What digital survey files (e.g. DTMs, Geodetic coordinate lists) affect the survey
- Which multimedia files are relevant to the survey (including ones generated in previous surveys and as part of this survey)?
- Which parcels are featured in these multimedia files?
- Where is the original evidence stored?
- Which people feature in these multimedia files?
- Which Physical features feature in these multimedia files?
- What other multi-media files are related to each other (e.g. sound file and video file recorded at same time, previous video is relevant to new one – different witnesses or contradictory testimony)

STEP 3: Develop Prefixes which uniquely define the entities

We want a prefix which defines a particular entity or reference. For example we prefixed a survey Record by SR and the suffix is the year in which it was created SR123/2009. It is preferable that each type of entity has a unique way of referencing and identifying it. You should not use the same identifier for two different objects either, even if they are of the same type. See Appendix C.

STEP 4: Document the Relationships between Entities

I suggest you draw a matrix on a large sheet of paper. List all the entities along the side and along the top. Then in the square matching two entities, write the possible relationships between them. Remember an entity can have a relationship with itself. E.g. A dog fights other dogs. The following is a simple table to determine the relationships between different entities.

Entities	**Dog**	**Cat**	**License**	**Owner**
Dog	fights other	chases	has	
Cat		fights other	has	
License				
Owner	owns	owns	purchases	

STEP 5: DEVISE A SCHEME TO RELATE THE DIFFERENT ENTITIES AS PER THE TABLE IN STEP 3

How do these entities relate to each other? The table above should provide these. Following this you should be able to determine if an entity is classed as Media or Reference. Remember a video can be related to another video and each of them can be related to a number of different people and parcels

STEP 6: LIST THE ENTITIES IN THE LOOK UP TABLE OF REFERENCES AND MEDIA

See appendix A to this manual

STEP 7 PROTOTYPE THE SYSTEM

Enter data and relate them. Play with the system and see what sort of queries you will require.

Then write down a rigorous set of data entry steps and methods of performing specific types of queries. This step is essential if you want a working system. The software allows a great deal of flexibility, which also means you can create a spaghetti system if you are not careful – you can create meaningless relationships between data objects.

You also need to write down an independent system of checking and quality management. Sign off on a record when it checked and properly entered. Close a record once no more editing should take place e.g. when a title is registered, the record relating to it should be closed.

STEP 8 DEVELOP SYSTEM BACK UP AND ARCHIVING PROCEDURES

This is a new software system and it is easy to delete the database inadvertently. Develop procedures to do monthly archives of the data and weekly back ups.
ALWAYS back up the database file OM.mdb before you install a software update. You may lose your entire database otherwise.

EXAMPLE: LAND TENURE RECORDS

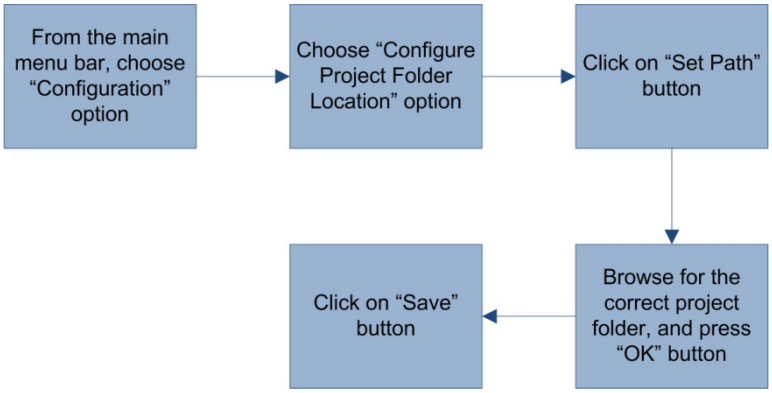
Land tenure records can be legally registered records or merely a record of claims to rights. The latter are commonly referred to as regularization or adjudication records. They may also be kept as a record of information for land claims. Video and audio files can be organized in the system as oral (undocumented) evidence.

4. HOW DO I...?

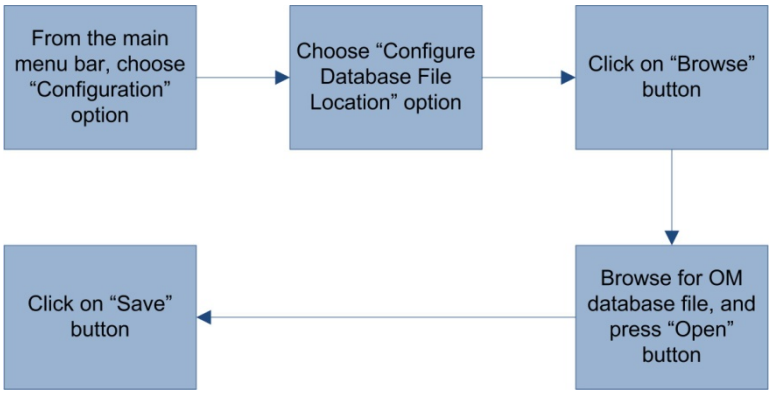
This section consists of easy-to-follow flow charts to show how the most common procedures work.

4.1 Procedures that applies to Configuration of a Project

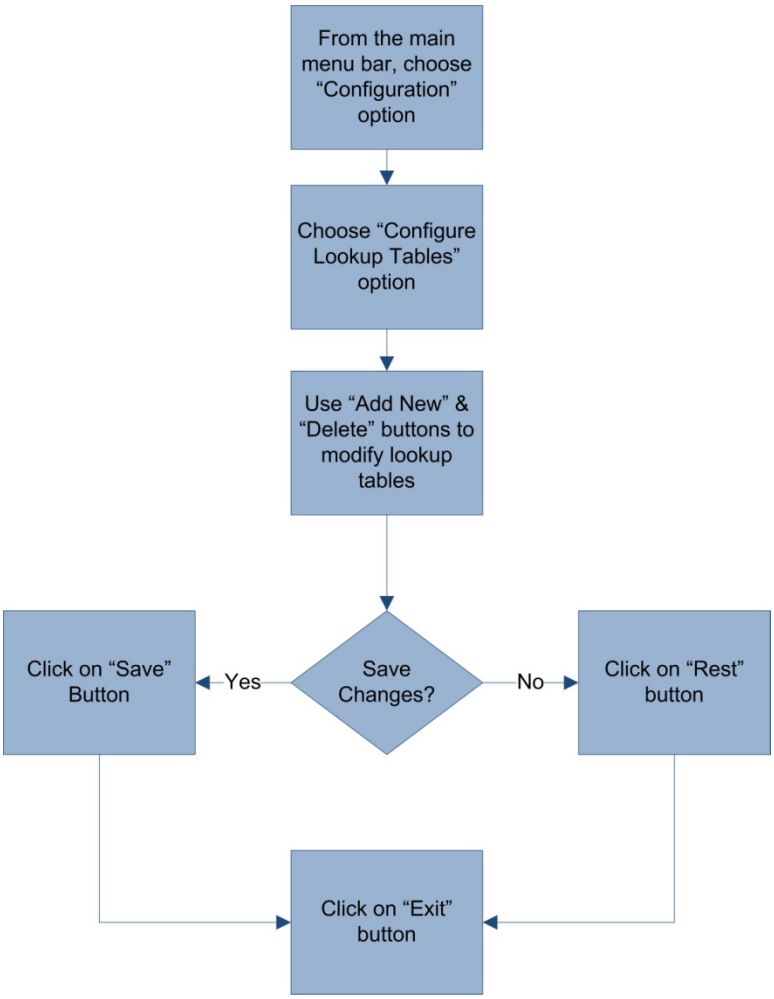
4.1.1 Configuring the Project File Location



4.1.2 Configuring the Database File Location

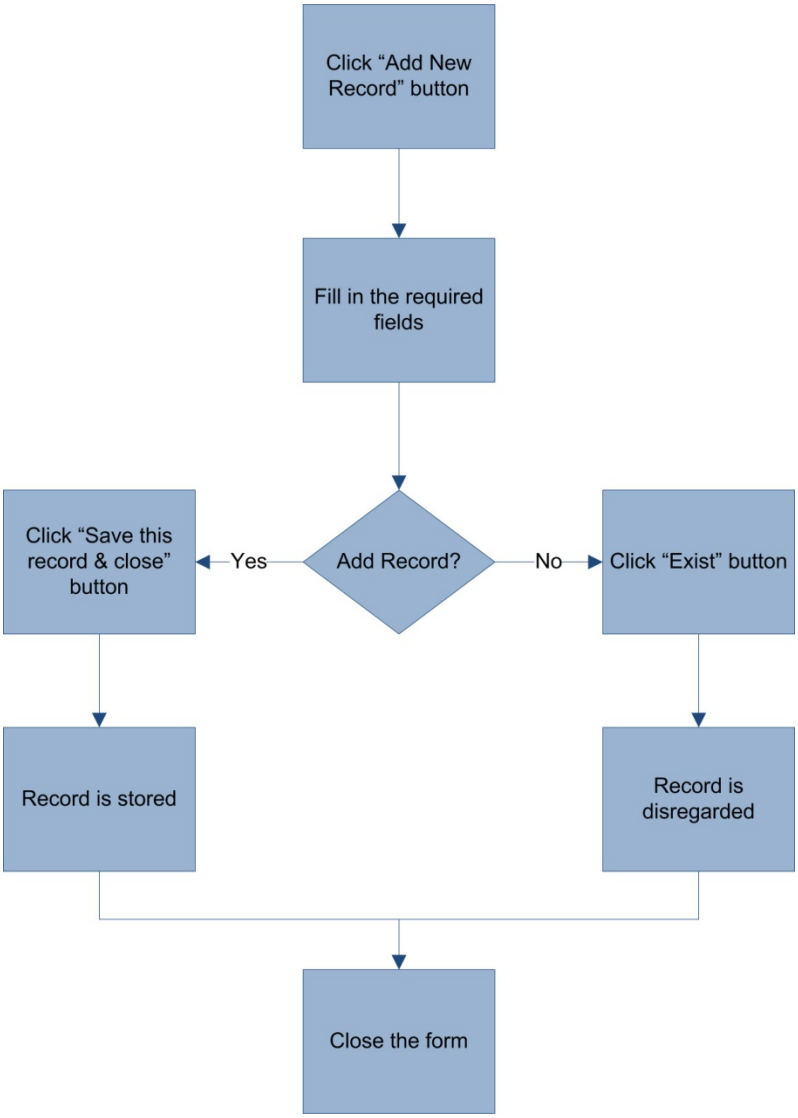


4.1.3 Configuring the Lookup Tables

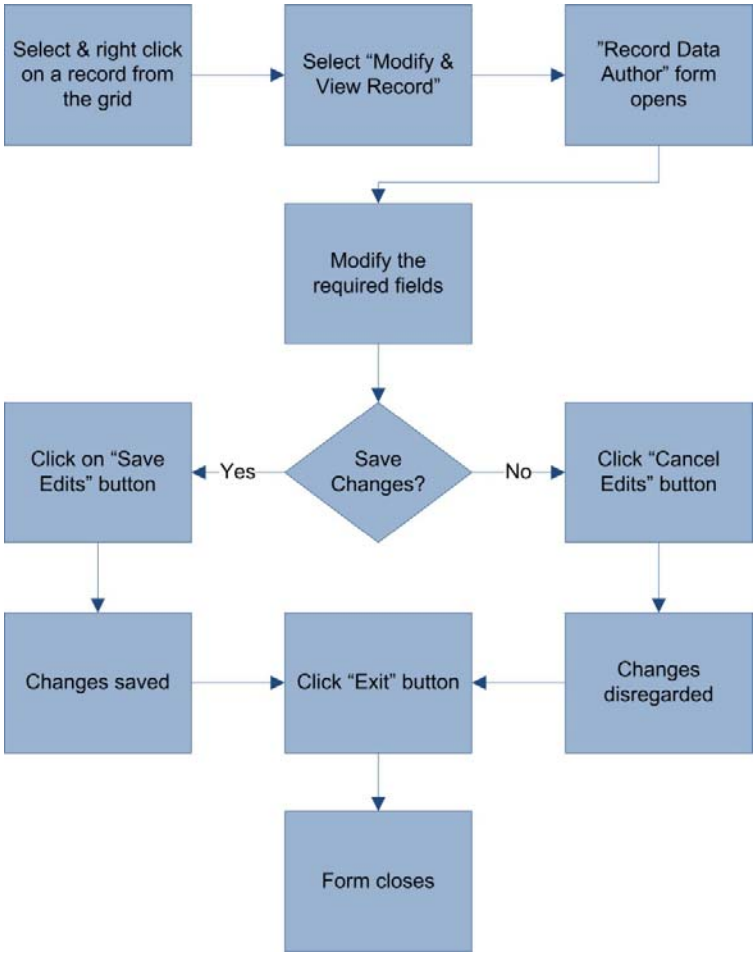


4.2 Procedures that apply to Person, Land Object, Reference Instrument, and Media records

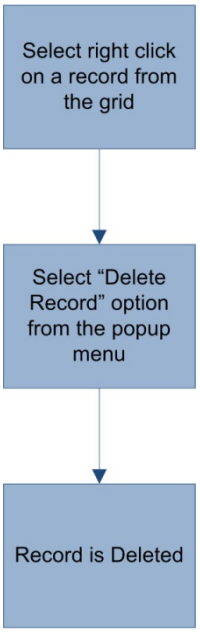
4.2.1 Add a New Record



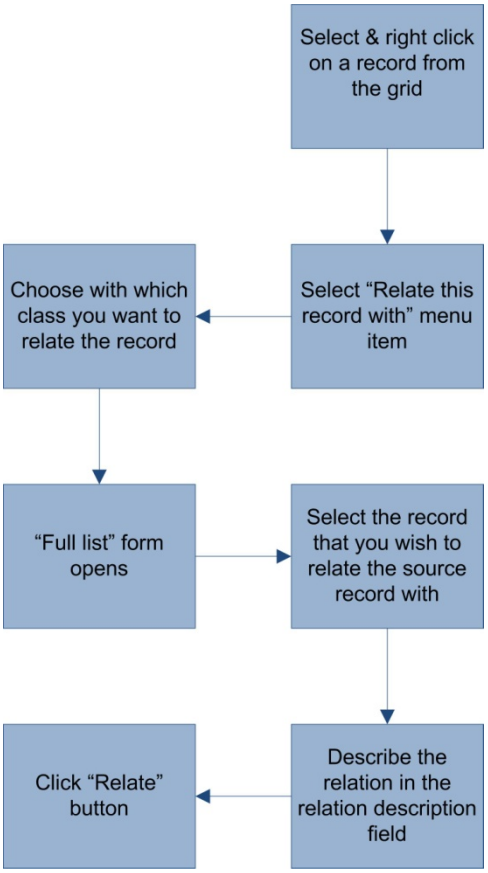
4.2.2 Modify or View Record Information



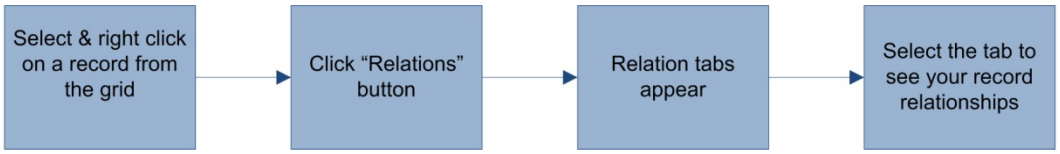
4.2.3 Delete a Record



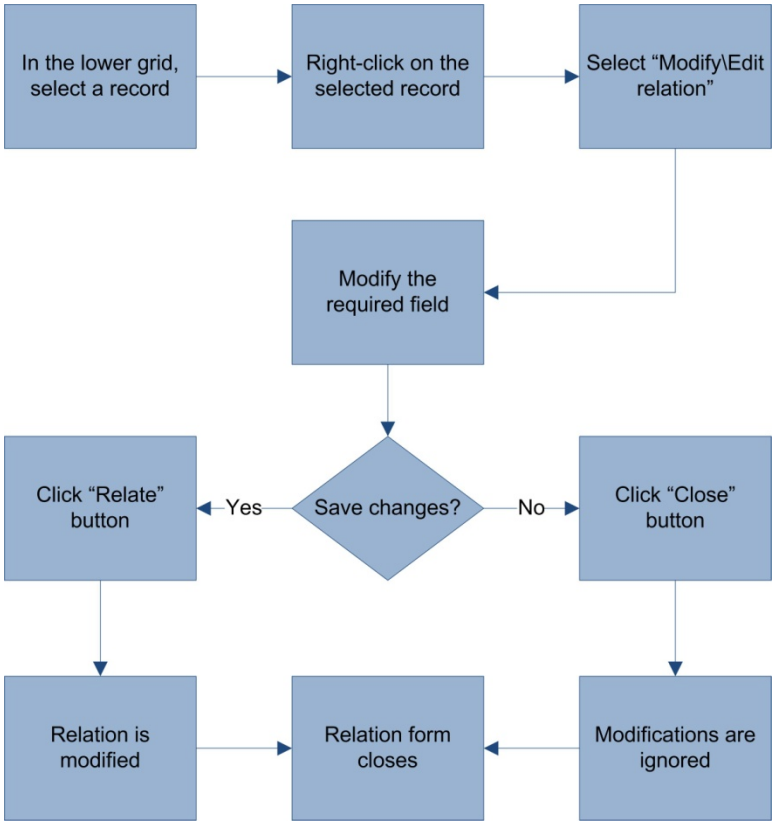
4.2.4 Relate a Record with other Records



4.2.5 Display Related Records

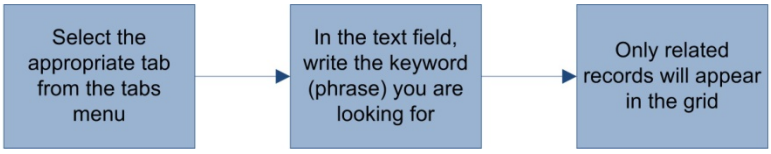


4.2.6 Modify or View Relations



4.2.7 Delete Relations

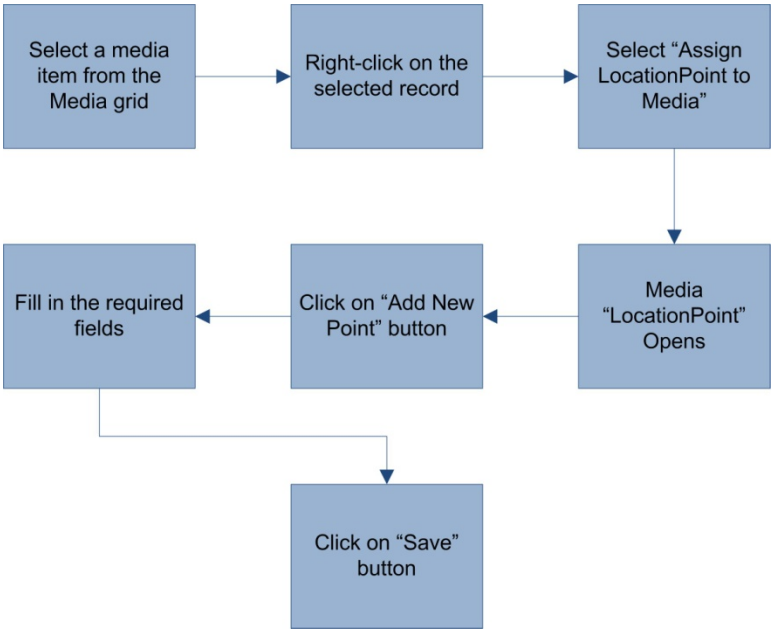
4.2.8 Search for a Record



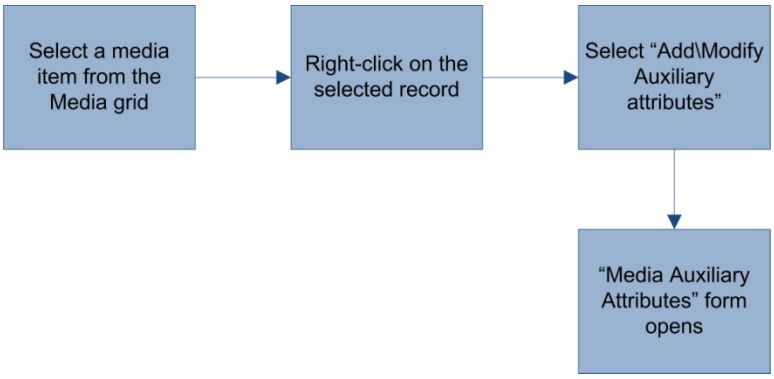
4.3 Procedures specific to Media Records

4.3.1 Show or Play Media Item

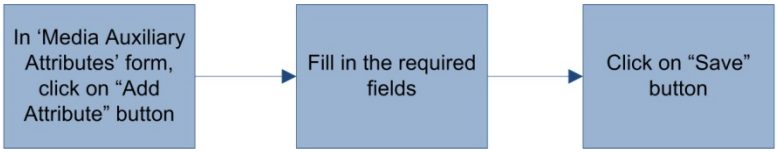
4.3.2 Assign a LocationPoint to a Media Item



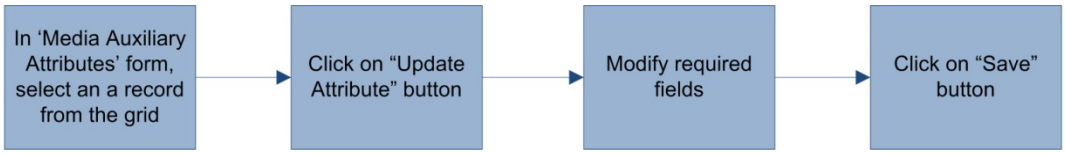
4.3.3 Access the Media Auxiliary Attributes Form



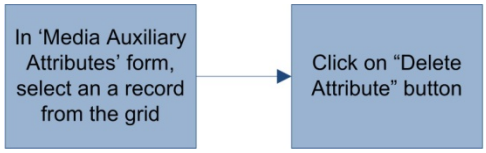
4.3.4 Add Auxiliary Attributes for Media Items



4.3.5 Update an Auxiliary Attribute for a Media Item

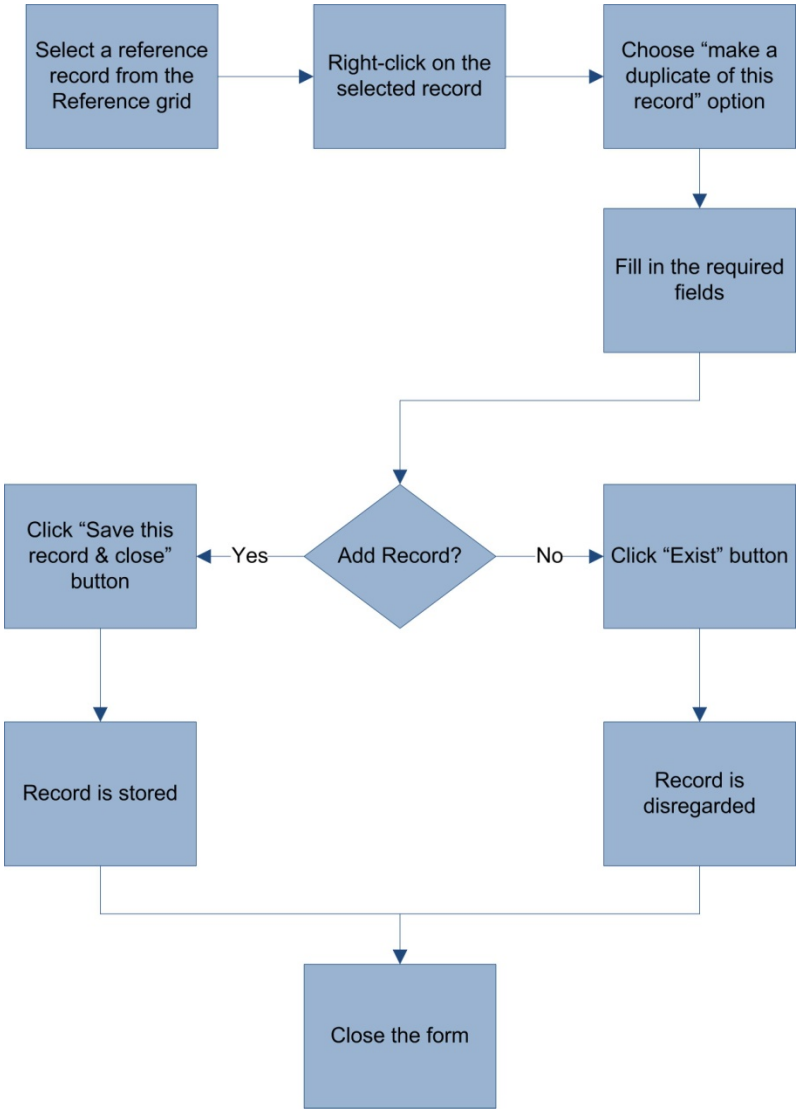


4.3.6 Delete an Auxiliary Attribute



4.4 Procedures specific to Reference Instruments

4.4.1 Duplicate a Reference Instrument



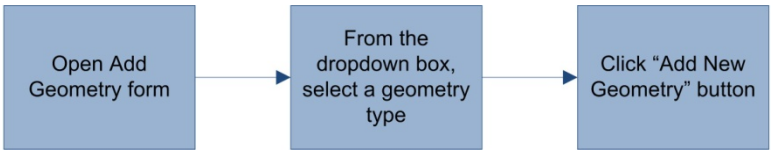
4.4.2 Mark Reference Instruments as Closed

4.5 Procedures specific to Land Objects

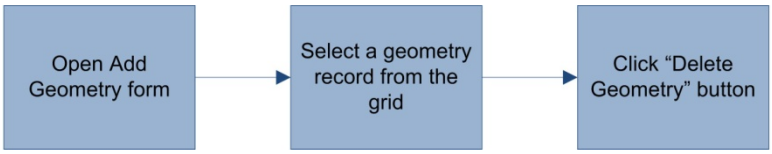
4.5.1 View Geometries of a Land Object

4.6 Procedures specific to Geometry

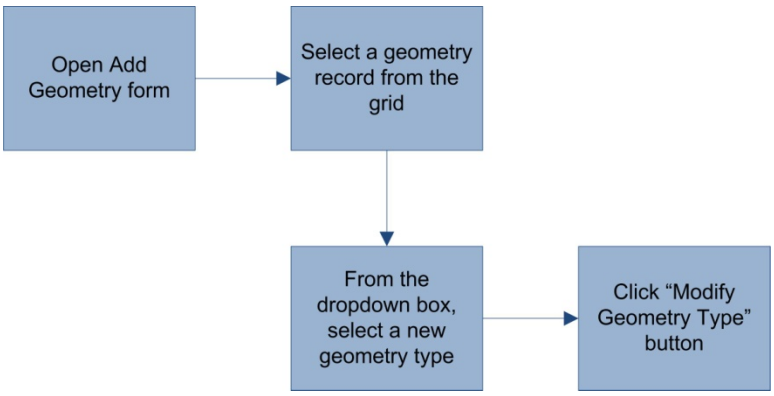
4.6.1 Add Geometry



4.6.2 Delete Geometry

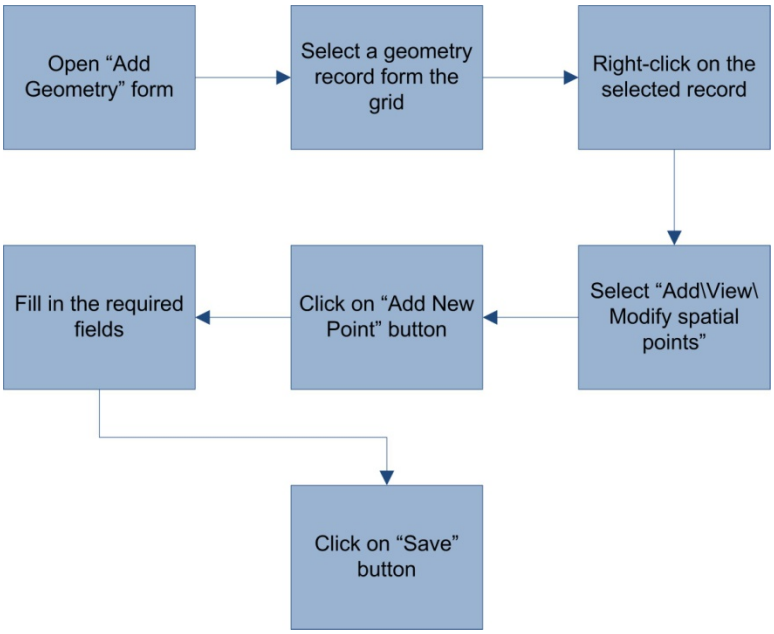


4.6.3 Modify Geometry

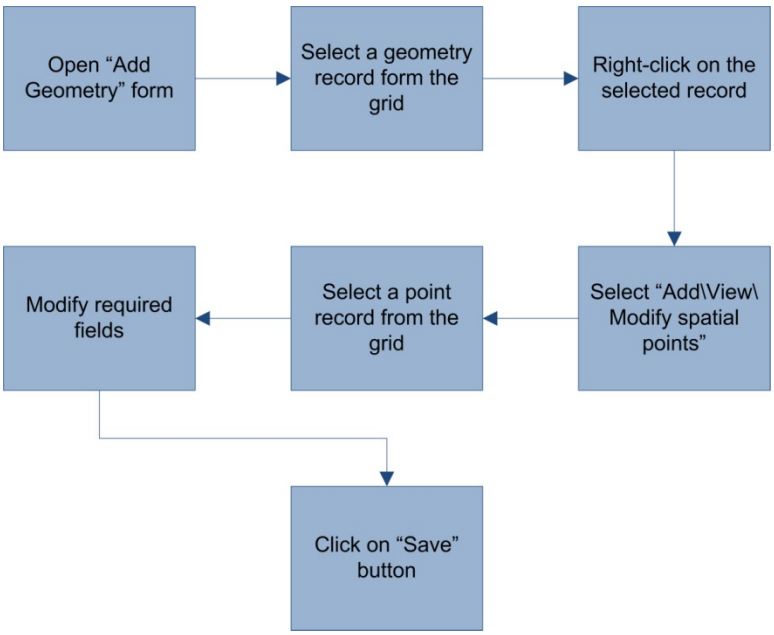


4.7 Procedures specific to Spatial Points

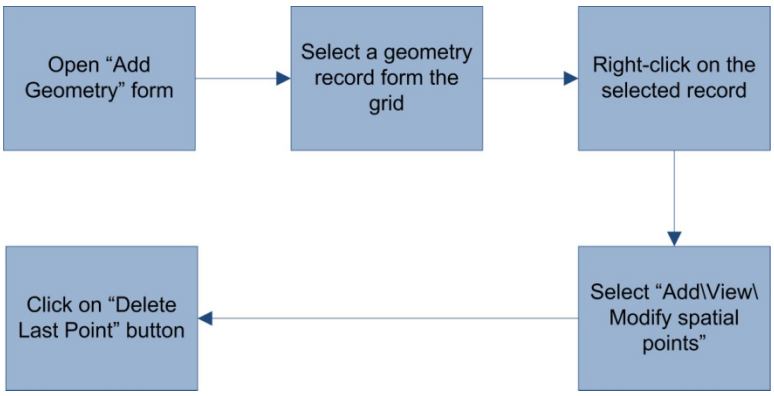
4.7.1 Add the Spatial Points of a Geometry



4.7.2 Modify the Spatial Points of a Geometry



4.7.3 Delete the Last Point of a Geometry



5. FREQUENTLY ASKED QUESTIONS

My system won't play the media files?

Before you enter data: In the Object manager, from the top menu, select Configuration and select Configure Data Sources. Set the path. You MUST do this before you start to enter media items, otherwise you will have to create these paths for each media item.

I've entered the data and my system won't play the media files?

Basically you have to set the path properly for each media item. To set the path correctly:

(1) Set the path of the project folder: Select Configuration >> Configure Data Sources click on Set the path button. Choose your project folder.
(2) For each media item, Right-click on the media item record >> select Modify & View Media Info >> click Get Media File button. Navigate to the media file and select it. Note the changes in the path field after this process.

In the Object manager, from the top menu, select Configuration and select Configure Data Sources. Set the path.

I want to add an item to a Look Up Table

In the Object manager, from the top menu, select Configuration and select Configure Data Sources. Select the type of LUT you require and select Add New and type in the new item.

Appendix A: KEY ENTITIES AND IDENTIFIERS

Dr Michael Barry,
Geomatics Engineering, University of Calgary
14 March 2011

The following is a list of suggested identifiers. Adapt them as you see fit. It may be an idea to examine Open GIS Consortium (OGC) and ISO documents for standard features, identifiers and codes.

Primary Identifiers for Registration

Name	Suggested Identifier or Prefix Form	Explanation	Jurisdiction
Title or Deed	T_A_09_4_123	Whether one calls this instrument title or deed or transfer is not that important. Change the first letter to D to reflect a deed if you wish. T_A_09_4_123 may refer to the 123 rd title registered in 2009. The T indicates that the instrument is the Title and it Transfers rights in the entire parcel e.g. ownership of the parcel or a long-term lease. The "A" may refer to the office or region in which the title is registered. The _4 may refer to the 4th change in rights on the parcel since the title was first registered. For example there may have been a servitude, a lease, a restrictive condition and a caveat (a kind of notice or warning) registered on the title since it was first registered. In this way one can check that any copies of the title match the current, up-to-date one.	

Name	Suggested Identifier or Prefix Form	Explanation	Jurisdiction
Partial Rights e.g. Servitudes (easements, right-of-way, profit a' prendre), Leases, contracts, licences	T_A_09_123 C_A_07_123 L_A_09_45	Instruments that may be registered on a title tend to be partial rights; we don't necessarily need to distinguish these from a title/deed in the database – we can still prefix this with a T. Otherwise a single-letter prefix may be used for all of these to indicate that they are partial rights; or the prefix may describe the type of rights which the instrument documents - e.g. one could have L_A_09_45 to uniquely identify a lease, S_A_08_52 to uniquely identify a servitude, C_A_09_345 to indicate a caveat (warning), etc. and perhaps add /1 etc. to indicate any amendments or endorsements to these instruments (e.g. C_A_09_345_1. Alternatively, one can use a single prefix such as C_A_07_123 to indicate some form of partial right or contractual relationship. One can choose to change the Title number if the land is sold or passed on to an heir or retain the same title number for numerous transactions. One merely changes the name of the legal person on the title and keeps a list on the front page to show the history of different owners. It may be safer to change the number each time a change of owner takes place though.	

Other Identifiers

Name	Suggested Identifier or Prefix Form	Explanation	Jurisdiction
Audio File	AU_2009_456		
Cadastral Information Plan	CIP_2009_123	Cadastral Information System Plan – government maps of cadastral boundaries and other cadastral information.	
Drawing	Dwg_2009_123	Drawing File	
Dwelling	Dwel_2009_567	Can be a number assigned to a dwelling, such as a shack.	
Feature Physical	Fea_2009_123	Physical feature such as a tree, river, power line captured in 2009. Note that a physical feature may be defined by a title/deed instrument or a survey plan or both – the definition depends on the application.	
Field Sheet Interview	IN_2009_10	Could be a questionnaire sheet or a written interview with a witness, duly signed as being a fair representation of what was said.	
Photograph	PH_2009_789		
Survey Plan or Diagram	SP_2009_345	Can be an internally assigned plan number or an identifier assigned by the Surveyor General or Registry.	
Survey Record	SR_2009_1234	Survey Record number 1234 of 2009	

Name	Suggested Identifier or Prefix Form	Explanation	Jurisdiction
Trap Line	??	Relevant to aboriginal rights and land claims. Determine a set of these as per the specific case.	
Video File	V_2009_123	Video may be stored or tape on some other rewriteable or no rewriteable media (e.g. DVD or CD). What may be important is some form of code should be incorporated in the identifier to show if the video is the original data, an edited version ad/ or a copy of the original data – it's not shown at the moment.	
Application Form	AF		Lagos