



Overview:

ConInfo is a **data management tool** for storing and managing conservation related data. It comprises 4 main data types: 1) Databases and spread sheets 2) GIS data 3) Image data 4) Documentation. Each conservation area (e.g. conservancy, concession, national park) has its own folder under each data type within which all relevant data are stored. Software such as Winzip (which retains information on folder levels and paths) precludes the need for users to copy the data structure as a 'one click' operation places the data they require in the correct location and folders on their computer.

With the development of an interface (currently underway) data can be accessed by all levels of users quickly, simply and effectively. Users can also extract the data they require and by retaining the data structure can regularly update or add to their data set simply ensuring compatibility over time.

Reason for development

With GIS data it frequently occurs that many (slightly different) copies of the same data set are in circulation at any one time. Also some data sets get chopped into smaller pieces and are later edited. People frequently have data spread widely within their computer and can not always keep track of where the data are or they even forget that they have them.

ConInfo was created to:

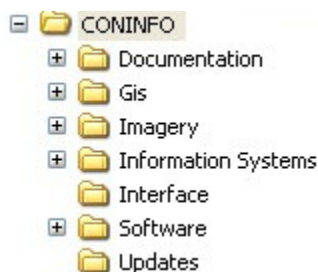
- 1) Bring all related data sets together in a fixed, understandable, standardised structure
- 2) Simplify management of the data
- 3) Reduce/prevent duplication and splitting of data sets
- 4) Allow GIS projects to be shared easily
- 5) Allow data to be more easily extracted and disseminated
- 6) Allow the data to be more 'usable' by a broad range of people with different levels of computing skills

Crucial Point 1

CONINFO serves as a data structure for the storage of all core data pertaining to Namibia's conservation areas. It provides a mechanism for data management and sharing.

Level 1

The first level of the structure **differentiates between data types.**



Crucial Point 2

The advantage of having a standard structure becomes evident when GIS projects are created. If all projects are created using only those shapefiles provided in ConInfo, then all users can have access to that project simply by obtaining a copy of the project file. This potentially greatly reduces time wasted recreating what someone has already done and avoids the need for copying and distributing many shapefiles when providing someone with a map. As the paths for all users will be exactly the same, the project will open immediately and correctly without prompting you to find the location of each shapefile.

Level 2

The next level **differentiates between spatial elements**: Protected areas, Conservancies, Concessions, Private reserves and community forests. Data pertaining to wider areas are stored in regional folders while the National folder contains data covering the entire country. The National folder contains all core data sets for mapping at a national scale. Wherever possible, the shapefiles are intersected by conservation area (conservancy, protected area, concession) and region, appearing as attributes in the associated tables.



Level 3

Each conservation area has its own folder at this level. As a new area emerges, a new folder with associated data will be created. **Note that these folders store detailed data specific to the conservation area.** The folders for each conservation area were introduced at this level to allow users to easily extract the data for an area (or areas) relevant to them without having to compile data from many different locations.



Crucial Point 3

The structure is so designed to prevent the creation and distribution of many subsets of national data. Having for example, clip outs of roads, rivers, towns etc. for each conservation area would be inefficient and would make a nightmare of data management. It would also cause many problems when it came to distributing project files.

Instead, it is a simple process to essentially carve up the national datasets, identifying which elements fall into each conservancy or concession, and simply having each one identified in the shapefile's attribute table. This process is referred to as performing an 'identity' or 'intersect' operation on the dataset. When the boundary of a new conservancy is defined, it simply requires performing an identity operation on each dataset required and replacing the old one with the new one. When the boundaries of a new conservancy are defined, a new copy of updated shapefiles will be available for download from the internet.



With the national data set containing attribute data for conservation area and region, mapping in Arcview of one or several chosen areas simply requires the use of the 'Theme properties' option. Having 'carved' up the national dataset according to conservation area now means that this one dataset can be used either at the national level or conservation area level or both. Say for example you wanted in one view, to show all communal conservancies in Namibia. You would add the conservancy shapefile, outline of Namibia and probably roads (just trunk or main) for orientation. In a second view, you might want to create a map specifically for one single conservancy. In this case you would only be interested in roads and tracks which fell within the boundaries of the conservancy. To extract only these sections of road, you would simply have to perform the steps outlined below.

Steps:

1. Go to the *Theme* menu and select *properties*
2. Click on the hammer (query builder)
3. Click on the box 'update values'
4. Now make an equation by double clicking on the items you wish to choose e.g. *Name = Torra*
5. Click ok
6. Close theme properties

Image Data:

Available image data include TM images, black and white orthophotos, a digital elevation model and scanned 1:250 000 topographical map sheets. Because new images (at higher resolution) are continually made available to the general public, image data do not form part of the regular CONINFO data updating procedure. Also owing to their generally large size, it would not be practical.

Software:

Useful software for GPS & GIS (e.g. extensions for Arcview) or PDF etc. is supplied in this folder.

Crucial Point 4

The success of the structure hinges on it being used correctly. In order for it to work, the structure should remain consistent on everyone's computer. As long as this simple rule is observed, receiving or providing data to other users is extremely simple.

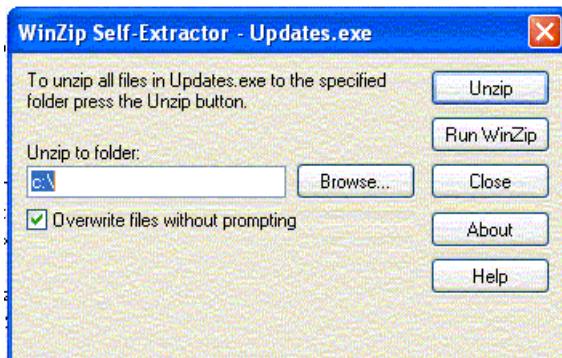
Winzip is used to create a self extracting exe file which retains folder information. When executed, files are automatically copied (and overwritten) to their correct location in ConInfo, ensuring the integrity of the structure.

There is no need to create any part of the structure from scratch on anyone's computer. If you find yourself doing this, you have done something wrong!

Not only does this process make copying and receiving files extremely quick, simple and efficient, it also avoids problems caused by people making typing errors.

To Receive data:

1. Double click on the exe file and the extract window will open



2. You are then shown a window which allows you to indicate to where you would like to extract the data. This will be **the drive where ConInfo** resides
3. If not drive C then type in only the following: e.g. If drive E then type e:/ (**This is very important!!**)
4. Click unzip
5. Make sure the 'Overwrite files without prompting' box is checked.

To copy data:

1. Select the folder or files you wish to copy in Windows Explorer
2. Right click on the mouse and select 'add to zip'
3. You are then shown a window which allows you to give the zip file a suitable name and indicate where you would like to save it to e.g. c:/temp
4. **Make sure the 'save full path info' or 'save extra folder info' box is ticked** (This is very important!!)
5. Click add
6. You now have a zip file of the data which you can e-mail or put onto CD/DVD for another user
7. If you have a licensed copy of Winzip you can make a self extracting zip file.

Important Note

In most cases, you will only want to copy some files located in several different folders. If this is the case, creating a zip file is not a problem.

1. Select the first file or folder you wish to copy in Windows Explorer
2. Follow the steps 2-5 above
3. Resize the Windows Explorer window and the Winzip window so that you have both on your screen at the same time.
4. Now (in Windows Explorer) select the other file or folder located in a different part of the structure you want to add to the zip file by clicking on it and holding down the mouse button.
5. Now drag it across to the Winzip window and release the mouse button
6. Click add
7. These files or folders have now been added to the same zip file
8. Repeat as many times as is required