



Quick Tour (Print Version)

July 13, 2005

1

Sharing Data has come a long way since the SouthWest Data Center was created in 1995. The physical act of transferring data has evolved from a "sneaker network" to electronic transfers via the Internet, share codes have been developed to cross reference the information and many institutional fears have given way to reason.

The simple act of sharing data is but a small step towards realizing the full value of GIS data. Value of information is greatest at the time of its creation. As information matures, it loses value. GIS data has the greatest value when maintained information can be instantaneously accessed in a form that can be used immediately.

The **Data Integration Project** is a working demonstration for realizing the greatest value for GIS data in a regional context. This website is the "output" component to a whole system that receives maintained data, integrates it into a common format and, distributes it to the public free of charge.

Click on [Regional Data](#) in your browser.

2

Developed on "best practices" methods, the system infrastructure is designed to facilitate technological change and embrace the advent of "better practices" as they evolve. For this reason, users of this system should also anticipate change.

Users should also understand, where a logical extension of this system could be used for "mission critical" applications, the current embodiment is for development purposes and therefore, intermittent system failure should be anticipated.

The system is also incomplete. Like a chassis, drive train and wheels on an assembly line, much needs to be added for the product to be complete. It is obvious in browsing the website, there are many places where parts have yet to be added. Please bare with us as our limited resources are being directed at other parts of the system.

Click on [Viewers](#) in your browser.

3

Data Producers are perhaps the most critical part of the system. Using ArcCatalog Spatial Database Connections, each of the member entities are currently up-loading maintained datasets to a designated database on SWDC's ArcSDE spatial database server. From this designated database they are than exported into a **Production** database where they can be served to the public as **discrete datasets**.

The data in the **Production** database is used to populate an integrated and normalized schema (data structure) in the **Publication** database. These **integrated datasets** provide the maintained seamless layers across the entire project area.

Currently, there are multiple ways the discrete datasets can be accessed. This will also be true for the integrated datasets.

Click on




**Data
Integration
Project** in your browser.

4

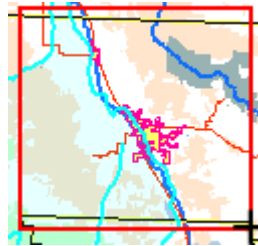
Supporting this map of the Data Integration Project area are maintained datasets from the appropriate producers of such data.

Public Lands is maintained and up-loaded from the Montrose office of the BLM.

The visible **Water** layer is maintained and up-loaded by the Colorado River Water Conservation District.

In the viewer, make sure the Zoom In  tool is active.

Place your pointer on the map just north of the Montrose boundary and left of the City of Montrose.



Depress the left mouse button and drag a rectangle around the City of Montrose.

Release the mouse button.

5

At this extent we are now seeing the **road layer** maintained and up-loaded by Montrose County.

In the viewer, click the Identify tool .

In the LEGEND / LAYERS frame, click on the plus box next to Transportation and again on Roads.

Click on the text "Montrose" to make the layer active.

Select a county road in the map and click on it.

- Transportation
 - Highways
- Roads
 - Delta
 - Gunnison
 - Montrose
 - Ouray
 - San Miguel

Information can be generated as a report for a specific feature such as a road. The field descriptions can be changed and additional functionality can be added as it is developed.

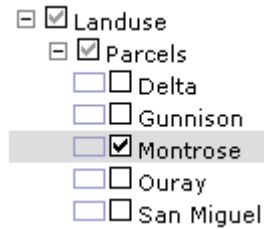
Close the Information box.

6

Again, in the LEGEND / LAYERS frame, click on the plus box next to Parcels.

Make Montrose visible by clicking the box.

Click on the text "Montrose" to make the layer active.



Click the Refresh Map button above.

Make sure the Identify  tool is active.

Select a parcel in the map and click on it.

The report is retrieving data from both the GIS department's geometry data and the Assessor's parcel data. The two data sources are maintained separately, up-loaded and joined on the fly in ArcIMS.

Close the Information box.

7

Again, in the LEGEND / LAYERS frame, click on the plus box next to Base Imagery and again on Hillshade.




Click the Refresh Map button above.

Raster images have been mosaicked and reside in a database by themselves. A back-up of this database is only made when new image sets are added.

The shaded boxes next to Topographic Lines indicates that the layer will become visible at the correct scale.

Orthophoto images (DOQQ) are being added and may not appear in all areas at this time.

8

Click the Zoom In tool  again and select the downtown area of the City of Montrose by depressing the left mouse button and dragging a rectangle around the area.



At this extent we are seeing both Montrose County's and the City of Montrose's maintained and up-loaded road and street centerline data in the same view.

In the LEGEND / LAYERS frame, click on the minus box next to Roads and then un-check the visibility on Streets.

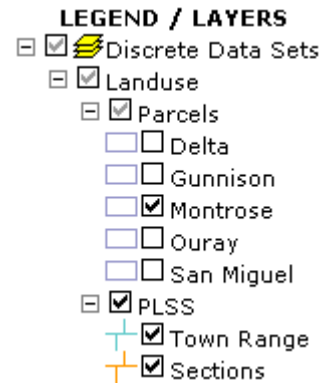


Click the Refresh Map button above.

We now see only the road data that Montrose County maintains and up-loads. If you un-check Roads and check Streets (Refresh Map) you will notice that the City has been maintaining second-hand data from the County. In the future they will simply retrieve the maintained county road data from this system.

9

Once again, in the LEGEND / LAYERS frame, click twice on the visibility box next to Discrete Data Sets to clear all the layers visibility.



Click the plus box next to PLSS.

Check the visibility boxes next to Montrose, Town Range and Sections.

Click the Extract tool  in the toolbar.

The Layer Extract pop-up window indicates which layers will be extracted from the spatial database. This list is based on the layers that are checked as visible. Only the data within the visible extent will be included. Clicking the Extract button will trigger a process that zips the data as shapefiles and downloads it via the Internet to a folder of your choice on your machine.

Close the Extract window.

10

Close the viewer.

Click on [Resources](#) in your browser.

Click on [Data Producers](#) on the left side.

Because the Data Integration Project provides public access to the **Data Producers** data, maintained up-dates are actually "**pushed**" into the system by member organizations.

Click on the Ouray County launch page.

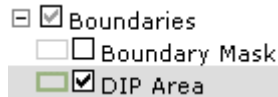


Click on the Ouray County Discrete viewer button.

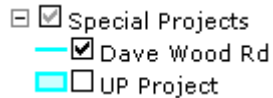


11

Un-check the visibility box next to Boundary Mask.



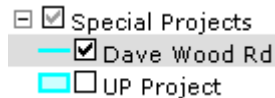
Check the visibility box next to Dave Wood Rd.




Click the Refresh Map button above.

Notice that the same maintained **Public Lands**, **Water** and **Boundary** data sources used in the regional viewer are also being used for each of the member's (Data Producer's) viewers. There is also continuity in the symbology, presentation and functionality to accommodate end user understanding.

Click on the text "Dave Wood Rd" to make the layer active.



Click on the Hyperlink tool  to make it active.

12

In the map, move the pointer over the bright blue line and click.

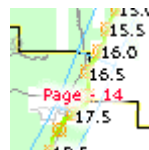
In the new window click on Viewer .

Click on the Dave Wood Road MapBook Demo Viewer.



Make sure the Zoom In tool  is active.

Select an area along the road segment and drag a rectangle as before.



Click inside one of the page polygons.

When the PDF image opens, select the print function  in the Adobe Reader. Print the page to your local printer.

13

Save southwestdata.org in your browser bookmarks.

Close all the open browser windows on your desktop **except** this Quick Tour.

Re-open southwestdata.org from your browser bookmarks (or enter <http://www.southwestdata.org> in the address bar).

Click on **Regional Data** in your new browser.

This Quick Tour has focused on the resources available to the general public using an Internet browser on your desktop.

For professional GIS personnel using thick clients, such as ArcView and ArcGIS, there are additional and more powerful tools available for utilizing the maintained data sources on SWDC's ArcSDE spatial database server. Simply use the navigation bar on the left to access these services. Descriptions and instructions are embedded in the webpages.

The goal of the Data Integration Project, as its name connotes, is to integrate data. Admittedly, at this point in time, only discrete data sets are available. However, it should be noted that the "data cycle" on which the integration process is dependent, is not only complete, but overwhelmingly successful. In fact, it is because of this success (and limited development resources), that the actual integration processes have experienced some delay. At the onset of this project it was anticipated that a demand for integrated data would be the catalyst for completing the "data cycle". What was underestimated, was the willingness of Data Producers to "push" their data into the system. Indeed, it was a fortunate problem. A time-out in the integration development became necessary to create a "container" for this enthusiasm. This website is that "container".

P.S. - Stay tuned for the real fireworks.

To all that have been instrumental in the success of this project, and there are many, thank you.

- rcm

Close this window - Enjoy!