



FEATURE STORY

What Goes Up

By Dan Piette, OpenSpirit President & CEO



Dan isn't the only one who looks snappy in a hat.

I wrote a couple of issues ago about the fact that the boom is back. There is no doubt that all of us in the energy industry are being buoyed by high product prices. The demand for all exploration services,

from seismic crews to rigs to logging trucks is hitting levels not seen since the early 1980s. Buildings are starting to spring up in Houston again – even in the Energy Corridor on the Katy Freeway. Houston is the only major housing market that showed a DECREASE in home inventory during the last quarter. Everyone is singing *Happy Days are Here Again*.

Not to be a wet blanket on the party, but I want to now ask the question – is this 1973 or 1982? In other words, are we looking at a stable and increasing product price for the next ten years, or the next two? I won't get into the debate about "Peak Oil" or "Plateau Oil" that is raging about us. There are smarter people than me that are beating each of those drums. (Take a look at <http://www.simmonscointl.com/research.aspx?Type=msspeeches> to see what I mean.)

My perspective on this issue comes down to a more fundamental issue: regardless of where you stand on product prices, you need to make your operations more efficient. Let's look at this two ways:

Prices are high and will stay that way forever. "The great thing about this boom is that it will last forever – just like all the others". If prices stay high, the demand for people and properties will drive the market. Engineers, geologists, geophysicists, and all the technical supporting staff will be in short supply. There will be tremendous pressure to make decisions quickly and

efficiently. Exploration companies will need to integrate all available information into their decision-making process and will have to modify the workflows that they have become use to in order to extract the most oil and gas as quickly as possible. Competition for people will force energy companies to let these professionals do more of what they like (find and extract hydrocarbons) and less of what they don't (seek, find, and load data). E&P professionals will have the choice of where to work, and will choose the places that best support their efforts to make them successful. Cubicles will become less common.

Prices decrease. "Please give us another oil boom and we promise not to screw it up this time. Whoops! Too late!" As prices decline, the advantage goes from the first mover to the marginal low cost producer. The ability to find and produce oil as cheaply as possible trumps the ability to find oil (full stop).

Companies are now rewarded for the most efficient use of their resources in the ground, and less so topside. The cunning ability to reuse data and find easily exploitable resources is what is prized above all. Integration of existing data with new techniques that lower finding costs are imperative. Cubicles spread throughout the industry.

The common thread in the two scenarios is the efficient use of resources. In each case (and the reality will probably be somewhere in between) the ability to integrate the resources at hand will separate the winners from the whiners.

And the best way to exploit the data in hand is to touch it as infrequently as possible, but make it available to everyone in the organization who needs it. Adopting a strategy that uses a truly vendor neutral middle-ware product (and guess who makes that?) allows the best use of the data.

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New OpenSpirit Releases

END USER CORNER Focus on BHP

Tech Symposium – October 30 in Houston

SHORT SHOTS OpenSpirit News

A New View with the OpenSpirit Web Server

NEXT QUARTER – Information from the Recent OpenSpirit Marketing Research Study



Infinite Integration

Generate Results

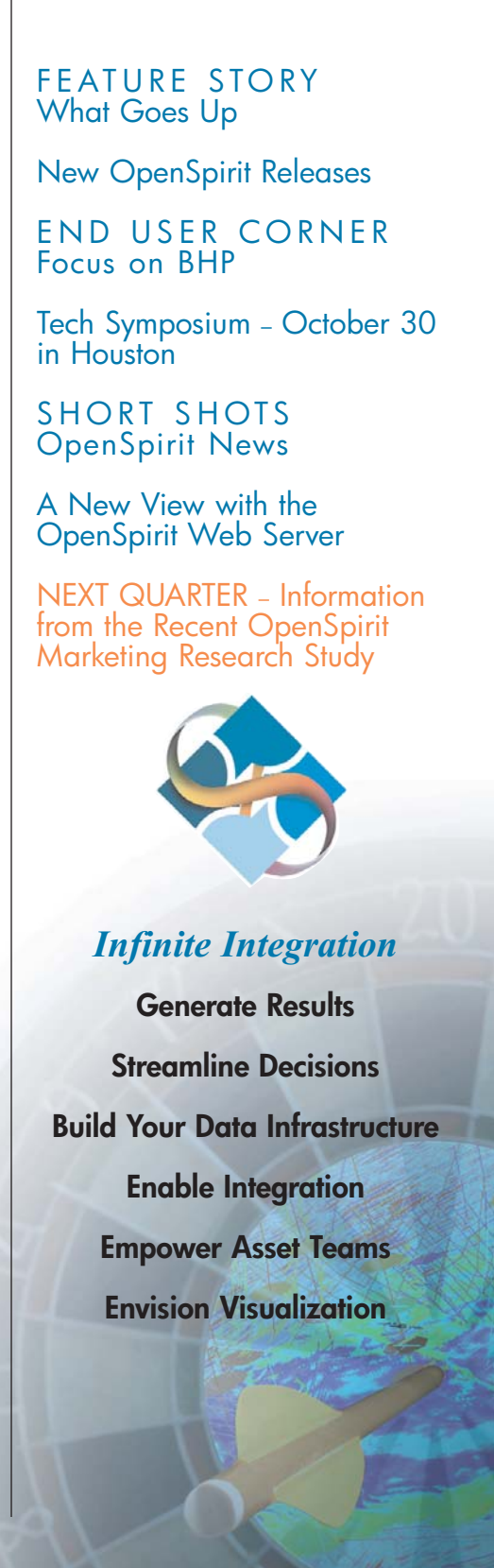
Streamline Decisions

Build Your Data Infrastructure

Enable Integration

Empower Asset Teams

Envision Visualization



And the best use of the data is the way to become the low cost producer (a better way would be to be Saudi Arabia. But not all of us have that option). The companies that understand the physical characteristics of their prospects and reservoirs are the companies that will be successful – regardless of product price.

The moral of the story is that booms do not last forever. No matter how much it feels like it will, we will at some point see prices decline and the old rules will still apply.

“Fortune favors the prepared mind”, as Louis Pasteur said. Satchel Paige was commenting on the same phenomenon when he said, “The harder I work, the luckier I get.”

Contact us if you want to be prepared. I swear it will not be *that* much hard work. ◆

SEG 2006 New Orleans – We’ll Be There!

SEG is Oct 1-4 in New Orleans, LA.

OpenSpirit will be there and we hope you’ll be there, as well. Yes, the city is

rebounding from Hurricane Katrina, but the Ernest N. Morial Convention Center and the surrounding area are in full swing. There have been several events in the refurbished convention center and they are well prepared for the SEG.

In the OpenSpirit booth (#2600), you can expect guest speakers and partner demos, and of course, plenty of OpenSpirit information!

Stop by Booth #2600 and pick up your LED key flashlight! ◆



New OpenSpirit Update Releases Available

v2.9.0.1 ArcGIS Extension and Excel Adapter

Management of your spatial data is a key component of your data integration strategy. OpenSpirit has enhanced your ability to have interactive display of your G&G data with the release of **v2.9.0.1**. With a focus on user-requested enhancements to the OpenSpirit ArcGIS Extension utility, this release is all about speed, efficiency and flexibility.

OpenSpirit v2.9.0.1 is a Windows .NET-only update release and includes the OpenSpirit ArcGIS Extension and OpenSpirit Excel Adapter. It is intended for updating OpenSpirit v2.9.0, or v2.9.1 Windows Satellite installations. With v2.9.0.1, you can now:

- Enable ArcMAP to receive and display automatically created shape files of well, seismic interpretation, and culture data types, including:
 - Well bore surface location
 - Well bore bottom location
 - Well bore path
 - Well pick
 - 3D seismic survey
 - 3D seismic volume
 - 2D seismic line
 - 2D seismic dataset
 - Horizon grid, pointset, or polyline
 - Fault polyline or pointset
 - Horizon-Fault boundary
 - GIS point feature
 - GIS polyline feature
 - GIS polygon feature
 - GIS grid
- Easily add and highlight selected data types in ArcMAP based on your areas of interest
- Group highlighted data by intuitive attributes, such as fields, surveys, horizons, and many more
- Select data in ArcMap and broadcast data selection, GIS, or Grid events to other OpenSpirit-enabled applications
- ArcGIS Extension is certified for use with ESRI’s ArcGIS 9.0 and 9.1.

The Excel Adapter upgrade enables support for the following additional data types: fault polylines, horizon-fault boundaries, and pointsets

Upgrade to v2.9.0.1 today

Experience the increased functionality, performance and efficiency with v2.9.0.1. The new enhancements will be made available via the normal OpenSpirit update procedures. Please contact OpenSpirit about receiving the upgrade and to start the upgrade process.

OpenSpirit v2.9.1

OpenSpirit **v2.9.1** is a Master and Satellite update release and is intended for all v2.9.0 installations (Solaris, Linux, Windows and IRIX).

Key enhancements and issues addressed with this update release

- Ability to name or pick an existing SeisWorks project when copying seismic data to OpenWorks/SeisWorks
- Support for non-seismic grids and 2D interpretation to the GeoFrame/IESX/Charisma data servers
- Support for GeoFrame 4.3
- Support for KINGDOM 8.0
- Miscellaneous bug fixes

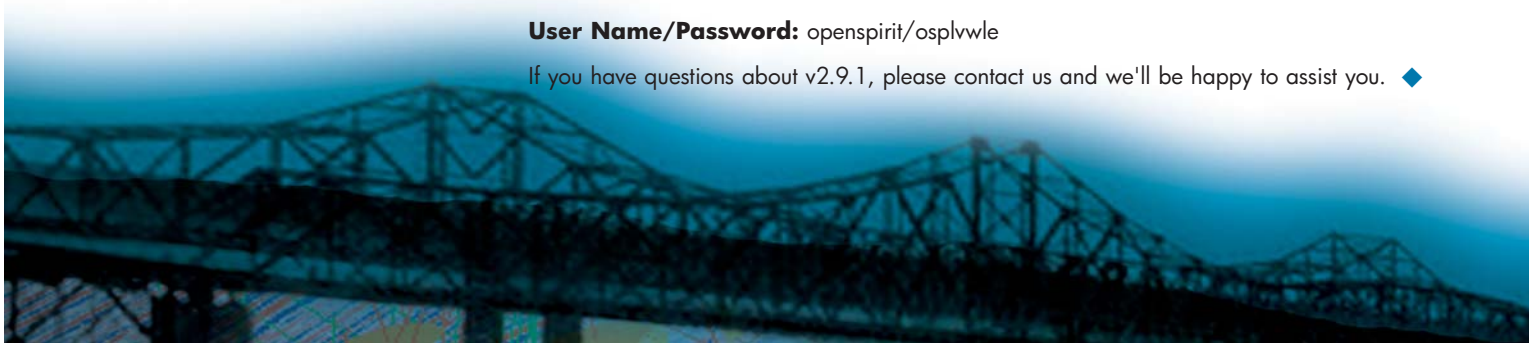
For a full description, see the Release Notes included with the update release at: <http://www.openspirit.com/documentation.html>

The OpenSpirit v2.9.1 release must be installed on top of an existing v2.9.0 Master or Satellite installation.

You can download the v2.9.1 update kits at: <http://www.openspirit.com/downloads.html>

User Name/Password: openspirit/osplvwle

If you have questions about v2.9.1, please contact us and we'll be happy to assist you. ◆



An interview with BHP Billiton Petroleum

Robert Graham, ArcGIS Applications Support & Data Manager, focuses on the needs of the exploration geoscientists in the Houston office. They have used OpenSpirit for 3 years.

What business challenges were you facing at BHP that prompted you to seek out an integrated solution like OpenSpirit?

We use a broad range of data stores in our IT environment, so we need a solution that will help us maximize integration and improve the efficiency of our team of exploration managers. The integration between Finder, OpenWorks, SeisWorks, GeoFrame, KINGDOM and ArcGIS has been the focus of our OpenSpirit development.

Please explain the process you are using to transfer horizons out of SeisWorks and into ArcMap.

Our geoscientists want to see the interpretive images generated from SeisWorks on an ArcMap document and overlay them with other cultural data for analysis. We use the OpenSpirit Scan SDE Utility to export the SeisWorks navigation and horizon list directly to ArcSDE. The GIS users can then add it to a map using the OpenSpirit toolbar. In fact, BHP provided funding toward the development of the Scan Utility's SDE option, which saves valuable time by allowing the end user to bypass the shape file step. Most casual GIS users aren't currently trained on making OpenSpirit sessions and projects, so our power users generally create the horizons from SeisWorks projects and provide them to the end users.

Do you do any work with live trace outlines?

The Scan Utility allows us to create outline polygons of the 3D seismic time slices of our SeisWorks data. However, during testing, we discovered that scanning all volumes changes the access date and can conflict with the dates in the Hierarchical Storage Manager (HSM). We developed a standard naming convention to avoid scanning all volumes in a project. This allows the files to be put in near line storage in the HSM.

Are you working on a process to integrate GIS information into Petrel?

Yes, we can gain a lot by moving GIS layers from ArcMap into our Petrel projects, but the workflow isn't as straightforward as it might sound, so we don't use it in practice at the moment. We need to work with the OpenSpirit team to get a little more training around this workflow. In addition, we will ask OpenSpirit to write a few scripts to help us keep our SDE project data up to date. ♦

NA Technical Symposium (Houston) – Registration is Open

The Technical Symposium will be held in Houston on **Monday, October 30**. The new **Version 2.9**, as well as details about **OpenSpirit Epiphany (v3.0)** and the **OpenSpirit Web Server**, will be discussed. Presenters are signing up to discuss their OpenSpirit integration experiences and a list will be published on the new **OpenSpirit Technical Symposium portal**, which can be accessed via www.openspirit.com.

Approximately 35 E&P professionals and partners from around the world attended the most recent Technical Symposium, which was held in Vienna in June.

Details

- Monday, October 30 at the Hilton Americas hotel in downtown Houston
- Registration includes: Continental Breakfast, lunch and evening social event at the Skyline Bar & Grill atop the Hilton Americas

Registration Fee: US \$250

Join your colleagues who have already reserved a space... Register today!



Mike Slee Joins OpenSpirit as Regional Manager for AP

OpenSpirit has opened a new office in the Asia Pacific region. Mike Slee, Regional Manager, joined OpenSpirit in mid August and will be responsible for direct sales and support for the region, as well as managing the existing OpenSpirit authorized agents.

"We are continuing to build our infrastructure and presence in the Asia Pacific region," says Dan Piette. "Mike has supported Asia Pacific in the area of E&P data management for nearly 20 years, and will spearhead the delivery of workflow efficiencies and data management solutions throughout the region."

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OpenSpirit Agent for China

OpenSpirit has named Beijing Co-Sail Software Limited (Co-Sail) as its regional rep in China.

"During the past few years, China has seen significant foreign investment and many of the super majors are showing an increased interest in developing partnerships with the national oil companies," says Dan Piette. "This global interaction, coupled with China's own interest in acquiring foreign oil and gas properties, makes the need for integrated data management a priority. The Co-Sail team will be an excellent partner and we are pleased to have them represent OpenSpirit."

"Co-Sail is dedicated to finding innovative new ways to exploit E&P technologies," says Co-Sail president, Leng Chuanbo. "OpenSpirit provides the level of seamless integration, support and customer support that our clients demand."

Yabo (Brian) Zhang
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OpenSpirit Calendar of Events

- SIS Global Forum, September 12-14, Paris
- SEG, October 1-4, New Orleans, LA
- OpenSpirit Technical Symposium, October 30, Houston

OpenSpirit Training Dates

- OpenSpirit Basics
- Tuesday, November 28
- OpenSpirit for Administrators
- Wednesday, November 29

Courses are held at our offices in Sugar Land Texas, as well as in Calgary. Information and registration instructions/form are available at: www.openspirit.com/training.html ♦

Take a Browser-Based View with the OpenSpirit Web Server

Would you like to see information about your well, seismic, interpretation and culture data through a simple, lightweight browsing tool? What if you could use this browser to view and launch your data from any OpenSpirit-enabled application or data store, including your GIS data in SDE?

Currently in the pilot phase, the OpenSpirit Web Server – *the only tool of its kind in E&P data management* – is designed to help you navigate, select and view data quickly and make faster decisions using a “there when you need it” Web portal to all of your OpenSpirit-enabled data.

Simple, lightweight browsing tool improves efficiency and decision making

- “Casual browser experience” is great for executives and G&G managers who need a quick spatial view of their areas of interest.
- “Power users” can get a quick glance at project data without tying up expensive application licenses. If desired, data may be selected in the Web browser and “broadcast” to OpenSpirit-enabled applications on the desktop.
- Customizable Web pages and integration with existing portals and Web applications provide maximum flexibility and ease of use.

See basic information on well, seismic, interpretation and culture data at the project level

- Select data sources and data types of interest.
- Pre-define and personalize layers.
- See data from all connected data stores.

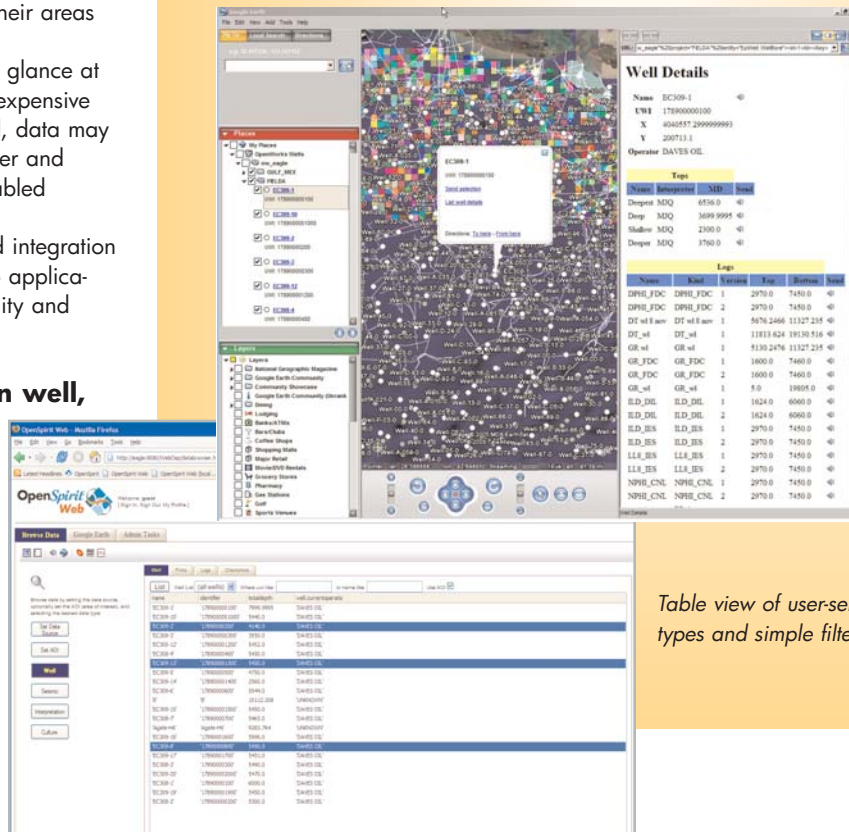
View data in easy-to-use “Geographic Explorations Systems”

- The OpenSpirit Web Server creates dynamic KML (Keyhole Mark-up Language) layers which may be viewed in lightweight 3D browsing tools, such as Google Earth, ESRI’s ArcGISExplorer and NASA World Wind.
- These applications allow overlay of OpenSpirit-generated well, seismic, GIS, and interpretation geo-registered layers on top of worldwide raster imagery available from the Internet. This type of display makes information readily accessible to a broad range of users who may not be comfortable with more complex GIS applications.

Use the OpenSpirit Web Server in your own Web application

An easy-to-use subset of the OpenSpirit Framework is exposed in a set of Web services accessible via http, allowing users to:

- Access hierarchical list of data store types, installation and projects.
- Query for any attributes of OpenSpirit data types (well, seismic, interpretation, and GIS features).
- Send data selection events (if user is logged into a desktop session).
- Return PNG images from any horizon grid.
- Return KML describing the point, polyline, or polygon geometry of well, seismic, and GIS features.



Well data from OpenWorks and SDE layers representing platforms, pipelines and lease blocks. Details displayed from a well selected in Google Earth via a dynamic query to the OpenSpirit Web Server.

Table view of user-selected data types and simple filtering options.

Final features of the OpenSpirit Web Server will be influenced by pilot projects being conducted over the next several months.

For more information, please contact us at sales@openspirit.com.



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