



FEATURE STORY

Defacto – When *Everybody Who's Anybody* is Using it

By Dan Piette, OpenSpirit President & CEO



Dan without his hat.

There's an old joke in the computer business that goes something like this: "The great thing about standards is that we have so many to choose from." This really isn't all that funny when you consider the inefficiencies and non-productive time that you endure when trying to harness disparate data and applications.

Exactly what are "standards", anyway?

Let me define some terms up front. *De jure* standards (which I will just call "Standards") are a sanctioned set of guidelines and protocols that have been promulgated and accepted through the work of a Standards Body (such as POSC, API, or the UL). Look at the bottom of your PC sometime to see some sanctioning bodies.

De facto standards represent a set of guidelines and protocols that have become so dominant in a specific marketplace that they get followed as if they were an officially sanctioned standard. (Think about the old Hayes modem AT command set that controlled the operation of a modem. This was a private, but open, set of protocols that no modem manufacturer could afford to ignore.). We believe that over time, the OpenSpirit APIs and software will be able to deliver de facto standards to the industry.

For many years people have lumped OpenSpirit in with "Standards" organizations. This is, of course, incorrect. It is unfair to us, as we have created a for-profit company which adds value to the upstream exploration and production software world by

enabling integration. And it is unfair to the official standards bodies, which must negotiate a standard that satisfies the disparate needs of its constituent members without regard to making a profit for the organization itself. The different structures suit the different organizations.

Sometimes OpenSpirit uses existing standards (for example, the Units definitions that POSC has created) and sometimes we do not (such as our own OpenSpirit data model – which can be downloaded from our Website). We eagerly embrace standards like PPDM when a sufficient number of our clients call for them, and yet we will resist working on an "established" standard (Epicentre) if we cannot see who will be able to use the software we have developed.

What this means is that OpenSpirit is not a standards organization, but a company that has used standards and proprietary (but open) technology wisely to create a "de facto" standard that can add value across the board from software and service companies to energy companies.

What value do I expect to be able to deliver?

Considering the business we are in, one would expect every company to have a similar definition of what a "well" is. But while we can probably all agree with U.S. Supreme Court Justice Stewart when he said (about pornography) that he "would know it when he sees it", do we all know what a well is? How, exactly, is a "well" defined? Is it the surface location? The bottom hole location? What if you have to side track? What about multiple completions? How about horizontal wells? Do you track the entire productive horizon? What about a log curve? Is that part of the well? How about the casing string? What is the cartographic reference

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Paradigm and OpenSpirit

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geoLOGIC Collaboration



Infinite Integration

Generate Results

Streamline Decisions

Build Your Data Infrastructure

Enable Integration

Empower Asset Teams

Envision Visualization

Paradigm to Join Chevron, Shell, and Schlumberger as an OpenSpirit Investor



On April 5, Paradigm™, the leading

geoscience software and services provider to the oil and gas industry for Rock and Fluid Interpretation™, announced that they have signed a Memorandum of Understanding to invest in OpenSpirit.

"Oil and gas explorationists and producers need cooperation of the leading geoscience application and data system providers to achieve the goal of finding quality prospects to replace oil and gas reserves and increase daily production. Paradigm is making a very definite choice to "play well with others" by sharing in the business vision and objectives of OpenSpirit," says Paradigm Executive Chairman and CEO, John W. Gibson, Jr.

Paradigm shares the vision and common goals for vendor-neutral infinite data and application integration practiced at OpenSpirit and will participate on the OpenSpirit Board of Directors. The addition of Paradigm contributes to the delivery of rapid geological, geophysical, and petrophysical (G&P) data model access among the industry's leading data repositories (Schlumberger GeoFrame and Finder, Landmark OpenWorks, and Paradigm Epos) and provides best-of-breed application interoperability.

"Paradigm's planned investment in OpenSpirit validates our standing as the market's only platform-independent, standards-based, and vendor-neutral integration solution for upstream data," says Dan Piette. "We are pleased to extend our application and data integration capabilities to Paradigm clients to help them reduce their E&P cycle time and lower risks by making sure they have the right data at the right time. We look forward to working with John Gibson and his global team." 

Register TODAY! 2006 OpenSpirit Technical Symposium in Vienna

The Technical Symposium will be held the day after the close of the exhibition on **Friday, June 16**, so you won't miss one minute on the show floor. To get everyone properly introduced, the evening social event will be held on *****Thursday, June 15.*****

The new **Version 2.9**, which includes new data store connectors for PPDM, ArcSDE, Petra and KINGDOM, as well as our plans for the next generation of OpenSpirit products, will be highlighted. Presenters are signing up to discuss their OpenSpirit integration experiences and we will publish additional companies and topics as more information becomes available.

Who needs to attend? More than 42 E&P professionals from around the world attended the most recent Technical Symposium, which was held in Houston last November. The attendees made the most of this information-packed day which included 6 end-user/developer presentations and plenty of open conversation.

- Oil company technology managers, planning managers and end users
- Software vendor product planners, marketing staff and development managers

Scheduled Presenters to Date

Paradigm
Resolve GeoSciences
Seismic Micro-Technology
Total
Transform Software

Details and registration

Coincides with the 68th EAGE Conference and Exhibition on **Friday, June 16, 2006.**

Registration Fee: US \$125

Registration includes: Continental Breakfast, lunch and pre-event evening social event

Location: Vienna Marriott (Parking 12a - in Stadtpark)

Social event: **Thursday, June 15** (location to be announced)

If you do not have Web access, send an email requesting registration to kathy.ashmore@openspirit.com.

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

Version 2.9 Released with New Data Store Connectors and "Satellite" Installations

Version 2.9 was released on March 8 and provides improved performance for 2D and 3D seismic data access, including display of layers, point sets, polylines and polygons, as well as display of IESX and Charisma 2D interpretation and non-seismic grids. In addition, the Scan Utility now includes full support in GeoFrame® for scanning non-seismic grids. End users will experience more efficient scanning and workflow management via v2.9's ability to read and transform custom coordinate systems from third-party applications.

New data store connections offer flexibility and improved productivity

Version 2.9 brings commercial availability of four new data store connectors: the multi-platform PPDM, Windows®-based Petra® from GeoPLUS and Seismic Micro-Technology's KINGDOM (7.6), as well as ArcSDE. The Recall data server is now in pre-release.

"Version 2.9 opens new doors for energy companies that have been clamoring for mission-critical data store connectors, particularly PPDM and Petra," said Dan Piette. "We are also introducing the concept of satellite installations, which will give end users the ability to run

the symbology that you are using to define the well status?

Now consider that you have a “well” stored in one vendor’s product and you want to display the “well” in another vendor’s product so that you can use it. And let’s say that you have picked a projection system in the data store that is different than the local (flat earth) model you have chosen for your display project. Do you call your geodesist or just export and import the well locations, trusting that the fact that the earth is round won’t cause a big enough distortion to make you miss your target? If the log curves are measured in sub-sea meters but all your interpretations are being done in feet using the KB as the datum, do you make sure that

system that you are using to define this well? Is positive down or up? Is it measured in feet or meters? Is the datum KB or sea level? What is the correct factor is applied? And what part of the well itself needs to be imported? Top? Bottom? Well bore path? TVD?

The Standards associated with the projection systems in this case will not help you make sure your well ends up plotted in the right location unless you also have a de facto standard of how you get the well from the data store to the application.

If the application in question is written using the OpenSpirit adapters, our services layer (we were SOA before SOA was cool) would make sure that as the well (and all of its associated data) gets served up to the application and that the appropriate transformations occur. The SOA enforces the de facto standards that have been written using our framework. And it does it without intervention by the end user – the person who is now overwhelmed by the demand for more work – faster and better.


And that is really the point of using de facto

standards in the day-to-day interpretation of subsurface data. The assurance that the data is correct, and the enforcement of the standards (de facto and de jure) can be trusted to the SOA that resides in the background, sort of like a quiet policeman enforcing the rules of the road.

The beauty of de facto standards is that they mutate as client demand changes. We know that in order to survive, we rely on exploiting the vicissitudes of the marketplace. “Standards” are not so flexible. This is where there is a fine line between having a protocol that never changes, and therefore becomes archaic and useless, and one that changes too rapidly, making it too hard for other users to keep pace. It is important that the de facto standards chosen (or that evolve) account for the ability to maintain some stability while addressing the market needs.

All this is addressed in the products we are now delivering to the market. By offering APIs to the development community with the commitment to support them for many years in the future, we gain the trust of both developers and end users in oil companies.

By keeping current with different data access demands and serving that data up to applications, OpenSpirit has made the commitment to the community that will increase the efficiency of the people not only writing software, but the ones who are looking for oil and gas.

We hope to be able to address the irony and confusion of multiple standards by allowing energy companies to use standards where they can, and de facto standards as they must. 

What’s up with SOA?

The latest buzz in the biz these days is all about SOA, or Services Oriented Architecture, which has been defined as:

“A paradigm for organizing and utilizing distributed capabilities that may be under the control of different ownership domains. It provides a uniform means to offer, discover, interact with and use capabilities to produce desired effects consistent with measurable preconditions and expectations.”



Alliance Geotechnical Services named OpenSpirit Agent for Asia Pacific Region

Indonesia’s reemergence as a lucrative center for oil and gas exploration and development highlights the need for integrated geoscience technology and data sharing.

“Indonesia is poised to change their economic climate and again become an exporter of oil through the redevelopment of marginalized fields,” says Dan Piette. “The resulting wide-scale domestic and international investment means both oil companies and investors need to quickly share geoscience data both within their companies and outward to prospective clients or partners. The need for an integrated data management approach has never been greater, and we are pleased to have Alliance Geotechnical Services as our agent as we become a part of this exciting new market.”

“OpenSpirit is champion for the cause of data integration and has become the industry’s leading advocate for seamless data communication between the major E&P software brands,” says Alliance president, Don Archer. “Alliance Geotechnical Solutions is delighted to represent OpenSpirit in the South Eastern Asian Region. Using the same level of close customer support that we share with all of our partners and clients in the region, we are confident that we will help make OpenSpirit the leading choice in total E&P software and data integration technology.”


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OpenSpirit Calendar of Events

- CSEG, Booth 1110, May 15-18, Calgary
- EAGE, Booth 820, June 12-15, Vienna
- OpenSpirit Technical Symposium, June 16, Vienna
- SEG, October 1-4, New Orleans, LA
- OpenSpirit Technical Symposium, October 5, New Orleans, LA

OpenSpirit Training Dates

- OpenSpirit Basics
- Tuesday, May 30 and August 29
- OpenSpirit for Administrators
- Wednesday, May 31 and August 30

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 

**Register for the next
OpenSpirit Live Webcast!**

www.openspirit.com

Collaborating on an Open Data Solution

Calgary-based geoLOGIC systems ltd. and OpenSpirit will collaborate to offer a system that combines the benefits of the OpenSpirit products and the geoLOGIC Data Center (gDC). Clients will be able to access data from the gDC using a variety of OpenSpirit and geoLOGIC tools.

"We created the gDC as an open system that uses the latest technology, including the newest version of PPDM, to give customers instant access to the most current petroleum data using the software of their choice," said David A. Hood, President of geoLOGIC. "The collaboration with OpenSpirit means our clients will be able to access our regular and spatially enabled data sets from the gDC through the OpenSpirit Scan Utility, and access and use data through a range of software applications made compatible by OpenSpirit products."

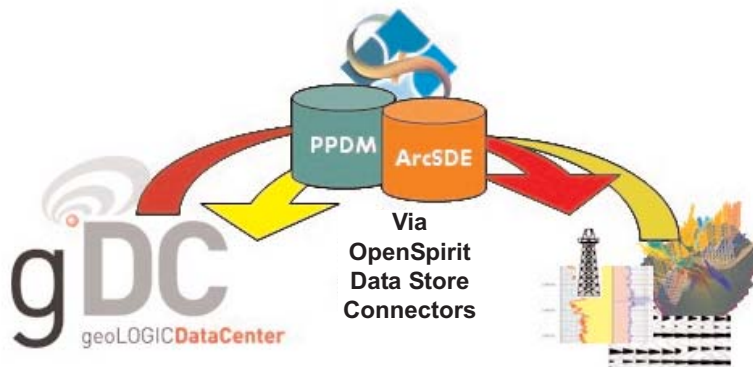
Get a LIVE look at your new data access possibilities using OpenSpirit (#1110) and geoLOGIC (#816)!

"Like geoLOGIC, OpenSpirit leverages a standards-based approach to provide end users with comprehensive and flexible access to their upstream data," said Dan Piette. "Through this collaborative effort, we will provide integration between geoLOGIC's outstanding gDC solution and the robust family of OpenSpirit-enabled data stores and applications, including the recently released OpenSpirit PPDM data store connector. I believe this partnership of technology and ideas will yield exciting new strides in the area of exploration and production data management."

The complementary nature of OpenSpirit and geoLOGIC will be showcased during the CSPE/CSEG in Calgary (May 15-16). ❖

PPDM & ArcSDE Users – Serve up your gDC data in real time at the right time

The new OpenSpirit data store connectors for ArcSDE and PPDM give you the power and flexibility to access your commercially available data via the gDC (geoLOGIC Data Center) and integrate it with your corporate or project data stores and geotechnical applications (Petrel, OpenWorks, GOCAD, etc.). It's fast, easy, secure and reliable!



Access your gDC data sets through the OpenSpirit Web Server, Data Selection tool or ArcGIS Extension:

- Wells
- Well bore lists
- Picks
- Well bores
- Log traces
- Well velocity

Add ESRI SDE layers for land, pipelines, directional surveys, bottom hole location, surface hole location, grid and culture, and field and pools.

Use the OpenSpirit CopySync utility to move data easily from the gDC to your OpenSpirit-enabled data stores, such as PPDM (v3.7), OpenWorks, KINGDOM and Petra, and leverage the OpenSpirit services for on-the-fly coordinate and unit conversion.

Combine power of spatial selections through GIS systems, such as ArcGIS or Google Earth, to search and display well and culture data. Further leverage your selections with robust ad-hoc queries using the OpenSpirit Data Selector Plus.

Unparalleled data quality and access

The gDC is a comprehensive online solution that integrates public and proprietary data while providing peace of mind to customers. geoLOGIC value-added data is accessible through any software application as the gDC leads the way towards a truly open system, from both business and technical perspectives. The gDC offers a broad range of data encompassing the widest range of data sets, as well as a technology able to manage proprietary data access for the most demanding customers. The gDC also offers a full suite of spatially enabled data from geoLOGIC and third-party partners. ❖

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VERSION 2.9

release of version 2.8 in July 2005, OpenSpirit end users have recorded workflow efficiency improvements as high as 99% and accelerated data transfer rates averaging 811%, so now clients can experience these results on a whole new subset of data." ❖

OpenSpirit-enabled data stores on hosts with different operating systems, whether across the hall or on the other side of the world. Since the



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