HRH: Gravitas

Gravitas (HRH Geological Services)

Product Description	
	Gravitas
	Version 2.0
	WITSML Object Specifications Version 1.2.1 and 1.3.1.1
	WITSML API Specification Version 1.2.1 and 1.3.1
	Gravitas is a client/server software suite comprising a powerful central database with a choice of integrated modules and options. With Gravitas you can collect data in real time, store current and historical well information securely, eliminate data transfer errors and produce reliable logs, charts and reports - all from one secure accurate data set.
	With the introduction of version 2, in addition to enabling WITSML facilities, the Gravitas WinDOT technology allows custom tools to be rapidly deployed to extend the possibilities for collaboration, data exchange and improving workflows in your environment.
	The modules in Gravitas are: • Winlog - the log drawing module • Wincore - the Sedimentology option for Winlog • Repgen - the report generating module • WinDART - the data acquisition module • WinDOT – The Digital Oilfield Toolkit
	Its multi user, multi server capability and seamless communication with corporate systems promote collaboration between disciplines for superior interpretation.
	Gravitas truly integrates asset and office, anywhere in the world, to give you effortless workflows, fast response times and well informed decisions.
	Connecting geology with the digital oilfield, Gravitas solves the traditional problems associated with data collection, integration and transfer, giving geologists the freedom to get on with valuable interpretation/analysis.
	Gravitas revolutionises the digital oilfield. It empowers asset teams with data integrity, improved collaboration and enhanced workflows for smarter business decisions and improved overall reservoir exploitation..

	HRH Geological Services
	HRH Geological Services provide integrated geological software and service solutions to the exploration and production industry worldwide. Spanning almost 20 years, our success is built on an in depth understanding of our industry and attention to detail.
	Our smart geological tools and skilled geologists transform geological data into real business intelligence, guiding our clients to greater productivity. And, by connecting geology to the digital oilfield, HRH streamlines workflows promoting greater collaboration for faster, better informed decision making.
	We are driven by the pursuit of innovation and excellence - developing tailored solutions and leading edge technology in partnership with our clients to maximise productivity.
	Combined, our technology and the knowledge of our expert geologists and consultants deliver detailed geological solutions with the potential to reduce drilling costs and optimise recovery.
	For more information please visit http://www.hrhgeology.com.
Availability	From June 2008
Submitter Information	Scott Petrie Technical Manager Scott.Petrie@hrhgeology.com May 9, 2008

WITSML Function Coverage	Check all that apply. Explain limitations and/or special circumstances in the Comments area.
	Notes:
	Functional coverage is organized according to five kinds of product functionality with respect to
	the WITSML Standards: two kinds of client functions and three kinds of server functions.
	• A product may exhibit multiple kinds of functionality. • The terms *client* and *server* are used here exclusively with respect to the WITSML Server API interfaces. Clients issue requests to servers. Servers receive and respond to requests from clients. • Behaviors for products that do not use the WITSML Server API are classified in an analogous manner.
	The five product classifications of WITSML functional coverage are:
	• Client Products -- 1. **WITSML Producer Client** -- a product that generates or otherwise obtains data that is formulated as WITSML object instances and sent to a WITSML Server to be incorporated in that server's data population. Examples of such products include products that pick up real-time data from sensor devices, format it, and send it to a server; and products that extract data from data stores, format it, and send it to a server. 2. **WITSML Consumer Client** -- a product that issues requests for data as queries of subscriptions to a WITSML Server and then receives data as query responses or subscription publications. Examples of such products include products that acquire data from a server, possibly reformat it, and delivery it to an application program or viewer utility. 1&2. Products the exhibit **combined Producer and Consume Client** functions may be application programs that operate directly on a WITSML Server, such as a mudlogging application or a pore pressure analysis application.
	• Server Products -- 3. **WITSML Receiving Server** -- a product that performs WITSML Server functions in general and, in particular, acquires data from external sources. Data acquisition may be through WITSML API interfaces or other mechanisms. 4. **WITSML Delivering Server** -- a product that performs WITSML Server functions in general and, in particular, delivers data to external destinations. Data delivery may be through WITSML API interfaces or other mechanisms. 5. **WITSML Managing Server** -- a product that performs WITSML Server functions in general and, in particular, supports requests from authorized client applications to augment (extend), modify, or delete (part or all) WITSML object instances. 3&4. The general understanding and expectation is that a product characterized as a WITSML Server supports **both Receiving and Delivering Server** functionality. 3&4&5. The **addition of Managing Server** functionality allows a WITSML Server product to do more than store and forward data, such as supporting data quality management client applications that help ensure the integrity and quality of data content in a Server data population. • General Functions -- 6. Virtually all products associated with the WITSML Standards will issue and/or process **WITSML Server General Functions** to determine the capabilities and version of a server product.
1. **WITSML Producer Client**	A product that (generates and) sends WITSML object instances to a destination process: 1a [_X_] Sends to a WITSML Server using AddToStore interface 1b [_X_] Otherwise

2. WITSML Consumer Client	A product that requests and receives WITSML data from a source process: 2a [_X_] Queries a WITSML Server using GetFromStore interface 2b [___] Subscribes to a WITSML Server using Publish interface 2c [_X_] Otherwise
3. WITSML Receiving Server	A product that performs the WITSML Server interfaces and receives data from source processes: 3a [___] Receives WITSML object instances via AddToStore interface 3b [___] Otherwise receives WITSML object instances 3c [___] Receives non-WITSML form data treated as if it were WITSML object instances or a virtual equivalent
4. WITSML Delivering Server	A product that performs the WITSML Server interfaces and delivers data to destination processes: 4a [___] Delivers WITSML data in response to queries via GetFromStore interface 4b [___] Publishes WITSML data in response to subscriptions via the Publish interface 4c [___] Otherwise delivers WITSML data 4d [___] Delivers non-WITSML form data derived from WITSML object instances or a virtual equivalent
5. WITSML Managing Server	A product that performs the WITSML Server interfaces and manages (augments, changes, deletes portions, or deletes entirely) WITSML object instances or a virtual equivalent: 5a [___] Processes modification requests via AddToStore, UpdateInStore, DeleteFromStore interfaces 5b [___] Otherwise processes modification requests
6. WITSML General Functions	A product that issues general WITSML Server interface requests to a WITSML Server: 6a [_X_] Issues GetVersion and/or GetCapabilities A product that performs the general WITSML Server interfaces: 6b [___] Processes GetVersion and/or GetCapabilities
WITSML Object Coverage	Mark D for **Deliver** and R for **Receive**, as applicable. If all functions do not apply, note either functions supported or functions not-supported, e.g. supported by 1a. Explain other limitations or special cases in the Comments area.
	[___] Realtime
	[___] Well
	[___] Wellbore
	[_DR_] Log & WellLog
	[_R_] Trajectory & Traj. Stn.
	[___] Message
	[_DR_] Mud Log
	[___] Rig
	[___] Survey Program
	[___] Target
	[___] Fluids Report
	[___] Operations Report
	[___] Risk

	[____] Formation Marker
	[____] Conventional Core
	[____] Sidewall Core
	[____] Cement Job
	[____] Tubular
	[____] BHA Run
	[____] WB Geometry
	[____] Other, specify: _____
Comments:	None.
Last Update	May 9, 2008 by Scott Petrie