

Petrolink: PowerSwitch

PowerSwitch (Petrolink)	
Product Description	<p>PowerSwitch</p> <p>Version 1.0</p> <p>WITSML Object Specifications Version 1.2.0 and 1.3.1.1</p> <p>WITSML API Specification Version 1.2.0 and 1.3.1</p> <p>PowerSwitch is the inter-store data synchronization tool that allows data transport between WITSML stores. It supports all vendor extensions and is capable of handling the non-standard implementations.</p>
	<p>Petrolink Services, Inc.</p> <p>Power products from Petrolink have been developed to allow the flow of any type, WITSML or non-WITSML, of Wellsite technical data in a secure and encrypted manner.</p> <p>Contact Person: Lee Geiser (Steering Committee)</p>
Availability	From January 2008
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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 <input type="checkbox"/> Queries a WITSML Server using GetFromStore interface 2b <input type="checkbox"/> Subscribes to a WITSML Server using Publish interface 2c <input type="checkbox"/> Otherwise
3. WITSML Receiving Server	A product that performs the WITSML Server interfaces and receives data from source processes: 3a <input type="checkbox"/> Receives WITSML object instances via AddToStore interface 3b <input type="checkbox"/> Otherwise receives WITSML object instances 3c <input type="checkbox"/> 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 <input type="checkbox"/> Delivers WITSML data in response to queries via GetFromStore interface 4b <input type="checkbox"/> Publishes WITSML data in response to subscriptions via the Publish interface 4c <input type="checkbox"/> Otherwise delivers WITSML data 4d <input type="checkbox"/> 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 <input type="checkbox"/> Processes modification requests via AddToStore, UpdateInStore, DeleteFromStore interfaces 5b <input type="checkbox"/> Otherwise processes modification requests
6. WITSML General Functions	A product that issues general WITSML Server interface requests to a WITSML Server: 6a <input type="checkbox"/> Issues GetVersion and/or GetCapabilities A product that performs the general WITSML Server interfaces: 6b <input type="checkbox"/> 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.
	<input type="checkbox"/> Realtime
	<input type="checkbox"/> Well
	<input type="checkbox"/> Wellbore
	<input type="checkbox"/> Log & WellLog
	<input type="checkbox"/> Trajectory & Traj. Stn.
	<input type="checkbox"/> Message
	<input type="checkbox"/> Mud Log
	<input type="checkbox"/> Rig
	<input type="checkbox"/> Survey Program
	<input type="checkbox"/> Target
	<input type="checkbox"/> Fluids Report
	<input type="checkbox"/> Operations Report
	<input type="checkbox"/> Risk

	<input type="checkbox"/> Formation Marker
	<input type="checkbox"/> Conventional Core
	<input type="checkbox"/> Sidewall Core
	<input type="checkbox"/> Cement Job
	<input type="checkbox"/> Tubular
	<input type="checkbox"/> BHA Run
	<input type="checkbox"/> WB Geometry
	<input type="checkbox"/> Other, specify: _____

Comments:	None.

Last Update	November 13, 2007 by Lee Geiser