Standards for production allocation

Improving IT/IM infrastructure decisions, 29 May 2013



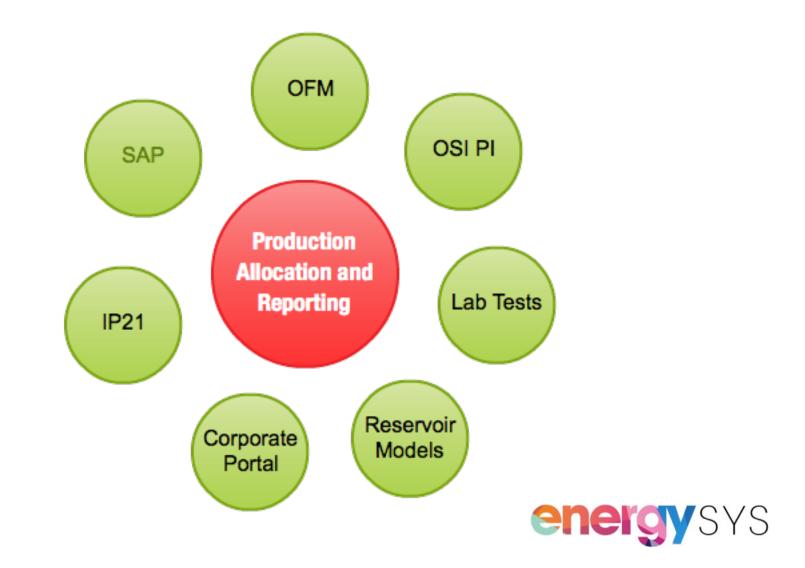


What is production allocation?

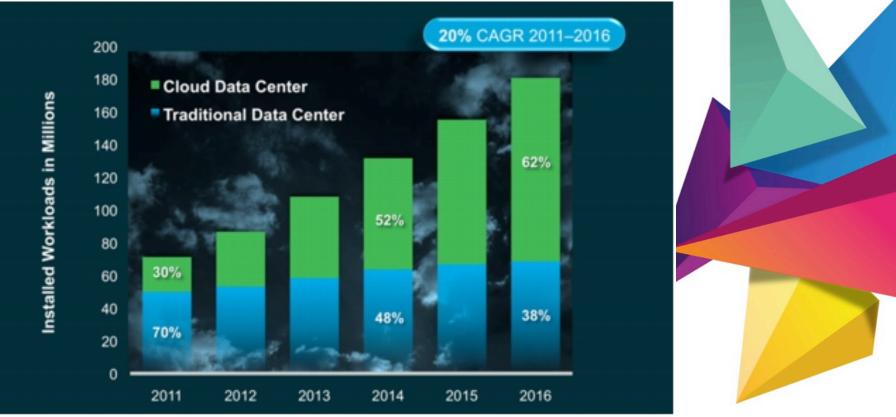
"The process by which measurements of commingled streams are related to multiple points of production, thereby supporting determination of ownership. Allocation may potentially involve oil, gas and water."



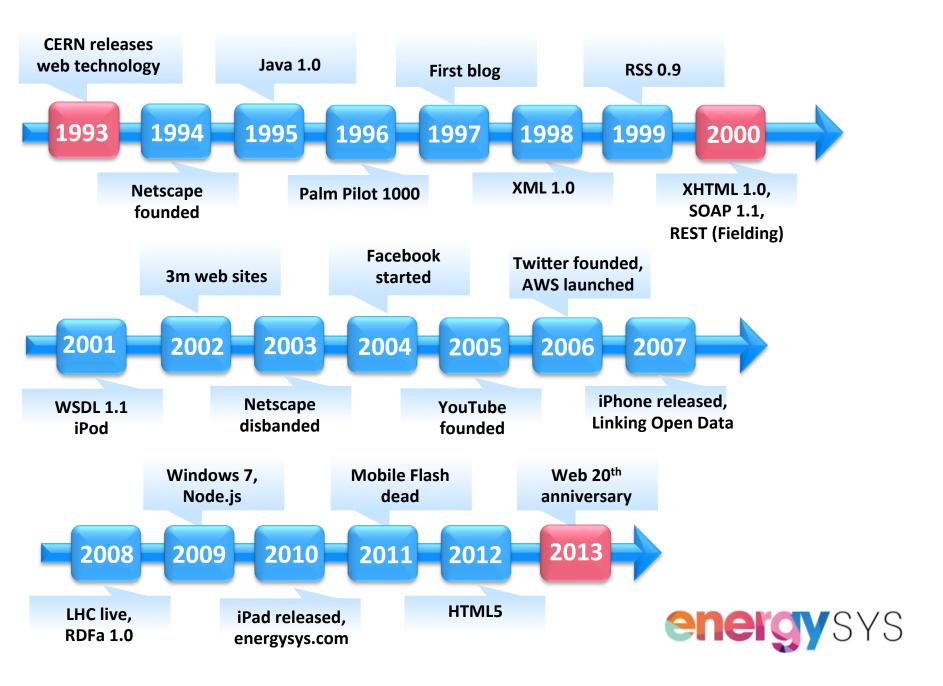
Integration challenges



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The web as archetype: REST

- Stateless
- Uniform interface
 - Identification of resources
 - Manipulation of resources via representations
 - Self-descriptive messages
 - Hypermedia as the engine of state

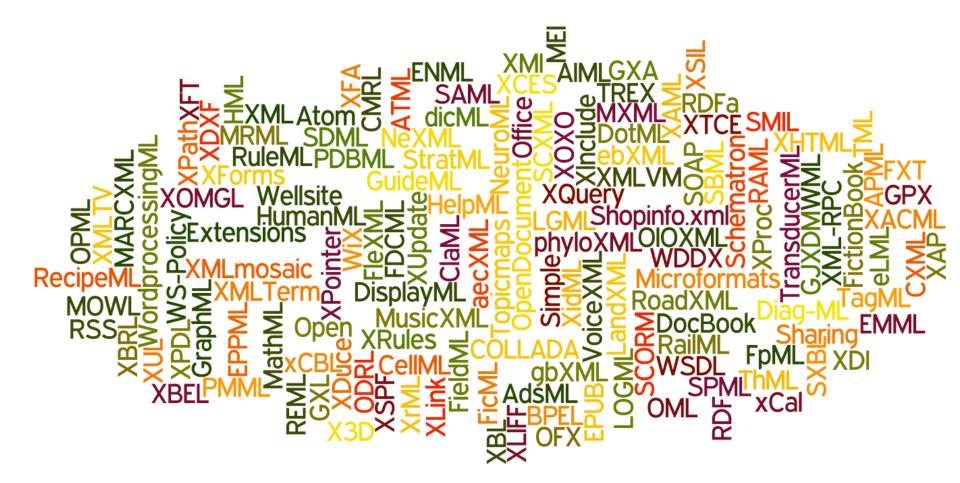


Standard needs

- Process standards
- Data standards (agreed content-type)
- Service standards



Markup soup



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PRODML: The Good

- DTS measurement
- Fluid analyses and samples
- Flow networks
- Production operations reports
- Production reports
- Historian data
- Well tests
- Wireline formation tests





PRODML: The Bad

- Implicit relationships
- Lack of hyperlinks
- Rigid structures



PRODML: The Ugly

- SOAP-based web service
 - GetData method
 - PutData method
 - DeleteData method
- Service not discoverable
- Data model not extensible
- No URI for representations





Imagine

- GET <u>https://live.energysys.com/123456</u>
 - Returns asset information
- PUT https://live.energysys.com/123456
 - Load data to the asset
- PUT <u>https://live.energysys.com/process/12224</u>
 - Load parameters for a process and run it
 - Return document is the URI for the executing process







To be a first class participant in a RESTful service-oriented architecture



Questions?

peter.black@energysys.com

