How BHP Billiton Petroleum Addresses Pitfalls of ArcIMS Implementation
Our way forward on complete integration of GIS and unstructured data
Our Guiding Principals for GIS

• GIS is an integral part of our mapping strategy
• Share GIS expertise company wide
• Value is in the data **not** in the application
• All layers in ArcSDE MUST have metadata

• WEB map delivery
• Map link to the Knowledge DB- unstructured documents (word, presentations)
• No need to know exact location or the name of the document
GIS as an Integral Part of Petroleum Mapping Framework

Advanced Mapping
- Petrel
- ArcMap
- Petrosys

Portal
- ArcIMS

Web Mapping
- Documentum
  - Document repository
- OpenSpirit
  - With CopySync
- Direct/Connect
- ArcSDE:
  - Local Tellus, IHS, other vendor data, geographical layers, geopolitical layers
- BHP B Geography Network - global layers and images

Common Mapping Middle Layer

Data Stores
- OW
- GF
- Finder
- ErMapper
- Probe
- CAD & Graphics
- Other IHS

Real-time data access

Early stage of application development

Data bases
- Applications producing data/vendor data
- Spatial DB/Direct connectivity
Why Web Mapping?

• No need to put advanced mapping on every desktop
• Web access worldwide
• Data Sharing without duplication
• Up-to-date information for managerial review, not a stale map
• Recycling of the value-add data
Getting Data From Internet and Intranet
What Did we Learn from our ArcIMS experience

• Got too excited about technology and overcomplicated published maps
• Did not want to redo them from scratch in ArcIMS author and used .mxd
• Used advanced GeoDatabase features
• Used too many ERMapper images
What and How do we Publish Now?

• Publish simplified maps as .axl
• Realize value of monitoring of the site
• Realize importance of coordination of ArcSDE layers update
• Do not use as independent web sites- use in Portal context
• Publish only SDE layers and have extensive metadata on them for future corporate metadata server
Way Forward

What web mapping tools do we use
Looking for Mapping Data Available in BHP B-
Participate in BHP B GIS Network

These four catalogs of data are available from BHP B Minerals. Petroleum will participate by contributing our global layers with detailed metadata.
Faster Selection of the Data for Purchase – Direct Connection to Data Vendors

From the client GIS, portal or application, petroWEB 3rd party seismic is available: WesternGeco, TGS, PGS, Fairfield, SEI, Veritas, etc.

Other data includes: Log, Basin, Field, Reservoir, Pipeline, Well, Production, Geology, etc.
Eden GIS

No Maintenance
Yeah!

Hosted data stores
Additional Value of Web Maps-
Linking Mapped Objects to Documents

...find information without knowledge of the exact location or document name

Access to Information:
- Documentum
- E-Room
- Web Maps
- Search network file systems
Making Search for Documents more Intuitive

Visual Searching
User Interface - Map

Web Map

Zoom
Active Layer

Select Map Object

Intranet

Internet

Direct Access to Documentum

Data Index

Documentum Files:
(Word, Images, PowerPoint)

Documentum UK, US, Australia

E-Room: Project Collaboration

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Partners

Archival
Searching for Documents without even Knowing Key Words or Exact Location of the Documents

SpatialSearchEngine Enabled Layers in Red
What Can you Search

Internet Search Options

Use Internet Search Engines to locate relevant information about the map feature.

Use industry websites to pinpoint relevant information about the map feature.

Use industry company websites to pinpoint relevant information about the map feature.

Utilize advanced tools on specific websites.

Use regulatory websites to pinpoint relevant information about the map feature.

Access commercial websites.

Access proprietary information with an enterprise license.

Add to your Favorites.
Selecting the Object from the Layer and Applying Geofilter
Documentum Objects Invoked from the Map Search

How to Load Gom3 data to SDE

Load the leases for use with Petrosys. Only Janis Austin is sourcing this data regularly for building lease maps in Petrosys. BHP is waiting for Petrosys to fix problem with labeling thru related tables of interest partners.

Steps
Run script after Gom3 monthly update.
1. Open Unix xterm
2. Run script - /home/graham/sde_gom3_leases.sh
3. These scripts create/init a few leases feature classes that will need further work.
4. Open the [Workspace1/07my/documents/imsoda_short_names.mxd]
5. Join the gom.esa_currentleases to gom leases@find1 by the leaseurn = plotDesc fields
6. Export to new feature class(gom.esa_current_lease_trunc2)
7. Remove redundant and unnecessary fields
8. Truncate gom leases
9. Load data into feature class mentioned in step 6.
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Conclusions

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- Do not use as independent web sites- use in Portal context
- Publish only SDE layers and have extensive metadata on them for future corporate metadata server
- Do not link to url, use key words to look for data
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