

ECIM 2023

Virtual Dataroom

NDR VDR as a Tool for E&P Workflow Integration

CHIDOZIE AGU (BEN)

DATA SCIENTIST

DecisionSpace[®]365

National Digital Resource



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Industry Challenges & Solutions

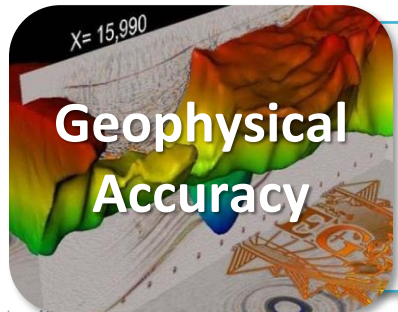
Industry challenges



Aging Hardware
Capital Constraints



Staff Constraints
Tedious Workflows



Emerging Technologies
Imaging Demands



Technology Driven Solutions

Processing
Essentials



Turnkey
Solution

Cloud
Computing



Elastic/Scalable
Hardware

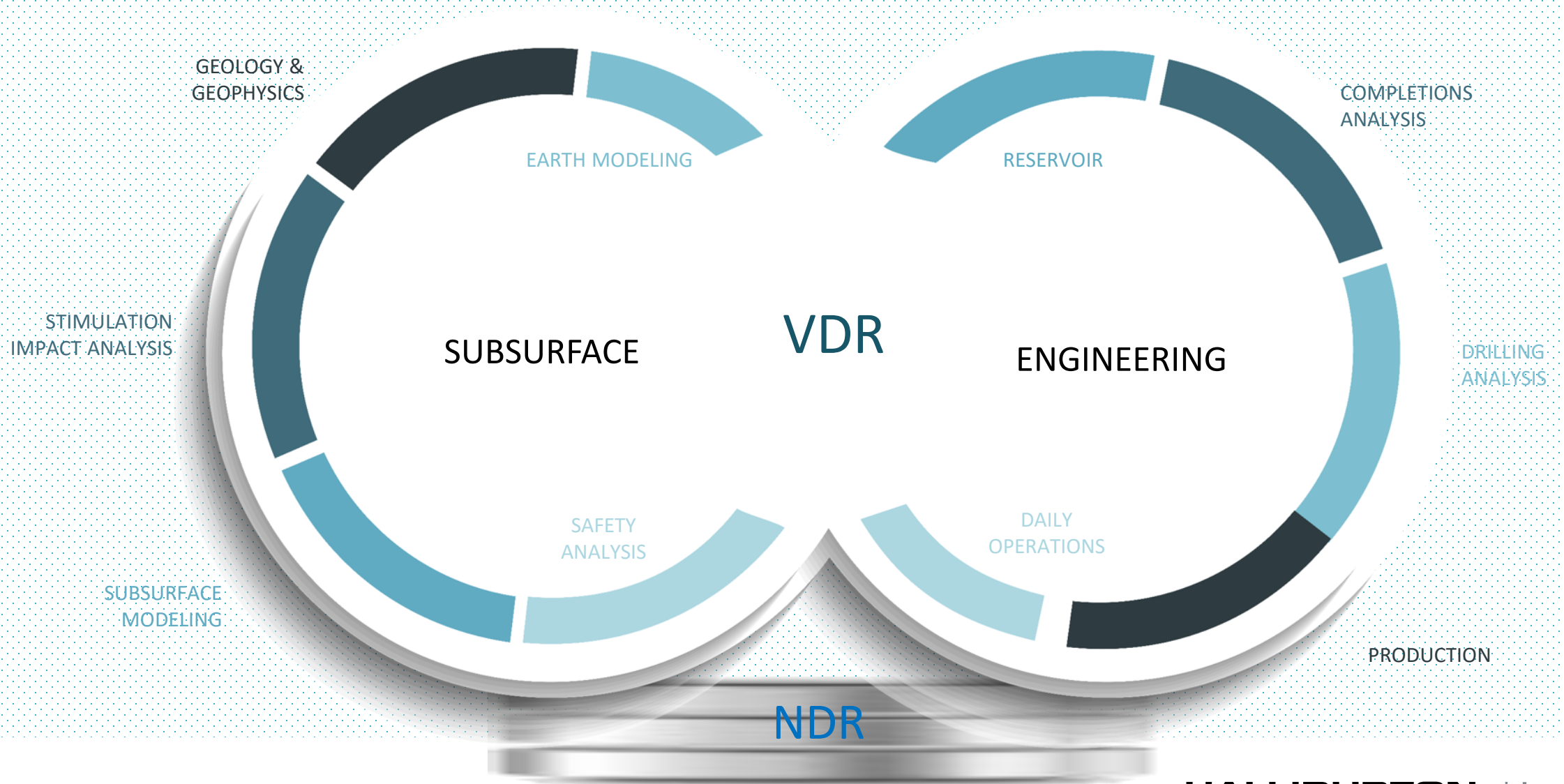
Machine
Learning



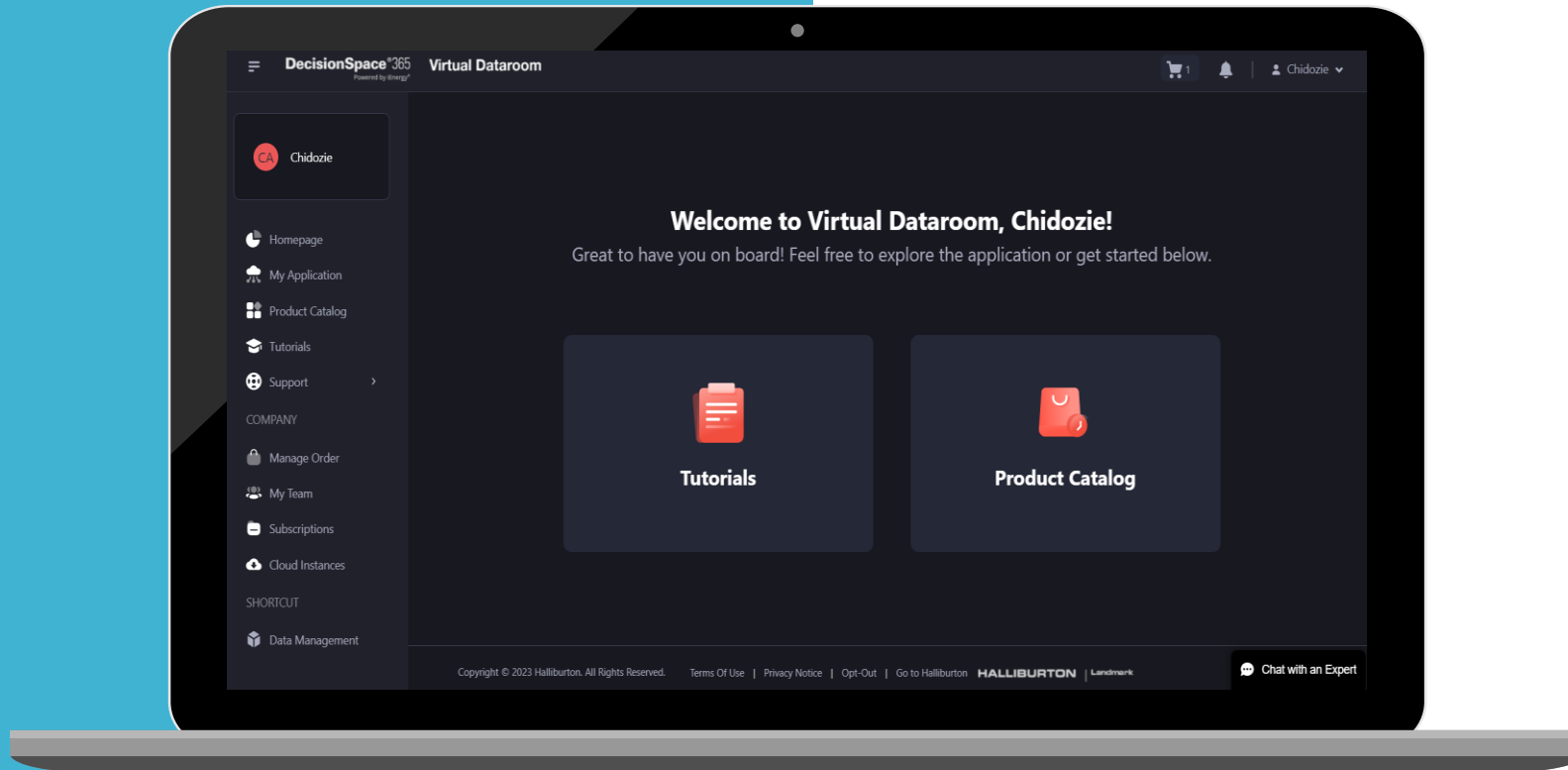
Streamlining
Workflows

DecisionSpace® 365 National Digital Resource is an out of the box cloud solution that provides a secure digital resource to preserve and protect national data and promote E&P investments in country through true digital transformation.

National Digital Resource



Virtual Dataroom



- My Application
- Product Catalog
- Tutorials
- Support
- COMPANY
 - Manage Order
 - My Team
 - Subscriptions
 - Cloud Instance
- Data Management

CA Chidozie

← Product Catalog

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- Tutorials
- Support
- COMPANY
 - Manage Order
 - My Team
 - Subscriptions
 - Cloud Instances
- SHORTCUT
 - Data Management

- DOMAINS
 - All
 - Subsurface (3)
 - National Digital Resource (3)
 - Cloud Infrastructure (1)

- PROVIDERS
 - All
 - Halliburton (5)

Products

Add-ons

Region AsiaPacific

Search Product

Products (2)



Virtual Dataroom Geosciences

National Digital Resource Version : 5000.ep5.1.01

Virtual Dataroom Geosciences provides a secure virtual workspace to promote and evaluate E&P acquisition and divestment opportunities for fast, cost-effective and informed decision making.

See Details

Add services in Neflex ⓘ



Virtual Dataroom Seismic Processing

National Digital Resource Version : 5000.11.0.1

It's a first turnkey solution for running seismic processing workloads to easily and efficiently process large volumes of seismic data, with the best performance, to develop an accurate image of the subsurface.

See Details

https://vdr.decisionspace365.io/dashboard

Chat with an Expert

DecisionSpace[®]365 Virtual Dataroom
 Powered by iEnergy[®]

Chidozie

Product Catalog

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COMPANY

Manage Order
 My Team
 Subscriptions
 Cloud Instances

SHORTCUT

Data Management

DOMAINS

All

Subsurface (1)
 National Digital Resource (2)
 Cloud Infrastructure (1)

PROVIDERS

Virtual Dataroom Geosciences

Features:

- Automated Fault Interpretation ⓘ
- Dynamic Frameworks to Fill[®] ⓘ
- ezValidator™ ⓘ
- Horizontal Well Correlation ⓘ
- Microseismic ⓘ
- OpenWorks[®] with GeoDataLoad™ ⓘ
- Seismic Analysis ⓘ
- Seismic Interpretation ⓘ
- ZoneManager™ ⓘ
- Automated Horizontal Targeting ⓘ
- Scenario Planning ⓘ
- Base with GIS ⓘ
- Earth Modeling ⓘ
- Geological Interpretation ⓘ
- Log Calculator ⓘ
- Natural Fracture Network ⓘ
- Production Data Analysis ⓘ
- Seismic Attributes Analysis ⓘ
- Velocity Modeling ⓘ
- Multi-Well / Multi-Pad / Platform Planning and Optimization ⓘ
- Relief Well Planning ⓘ
- Knowledge Management ⓘ

Resources:

- Appl Delivery : Workspace
- File Transfer Storage (sftp) : 5 TB
- Additional Storage : On Demand
- Include Office : Yes
- Desktop Storage : 750 GB
- Shared Storage : 1 TB*
- Workdocs : 1 TB

Integrated Geophysics and Geology Interpretation

Execute Together, Faster

EMPOWER YOUR TEAM

- Access anywhere, anytime
- Enhance collaboration and productivity
- Rapid and accurate modeling

Asset Interpretation



Visual Interpretation



Framework Construction



Reservoir Interpretation

Seismic Data

Seismic Attribute

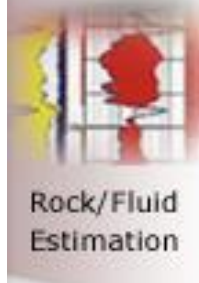
Horizon

Fault

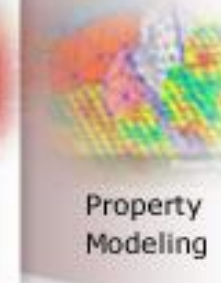
Polygon

TxD Table

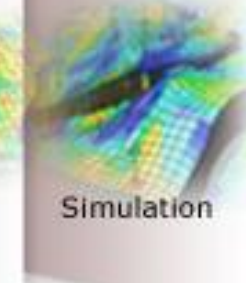
Integrated Asset Characterization



Rock/Fluid Estimation



Property Modeling



Simulation

Synthetic

Velocity Model

Pts, Grid, Contour

Logs

Picks

Lithology

Development Plan and Optimization



Model Reservoir



Well/Network Planning



Reservoir Simulation



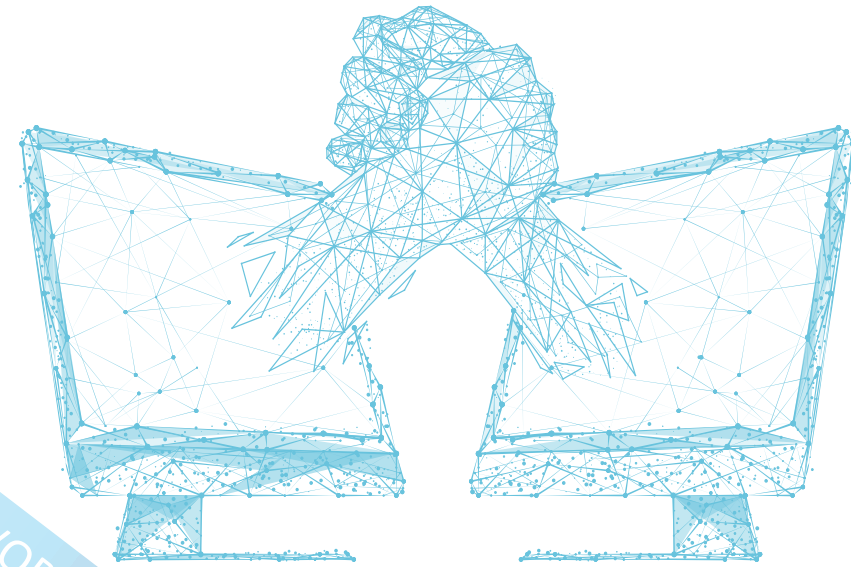
Develop and Update

Stratigraphic column

Geological model

Simulation model

Production



VDR

WORKFLOW INTEGRATION



Cloud Instances

SHORTCUT

Data Management



PROVIDERS ▾

All

Halliburton (5)

Virtual Dataroom Seismic Processing



Features:

- ✓ SeisSpace[®] Field ⓘ
- ✓ SeisSpace[®] 2D ⓘ
- ✓ SeisSpace[®] 4D ⓘ
- ✓ TomoMVA ⓘ
- ✓ SeisSpace[®] VSP ⓘ
- ✓ SeisSpace[®] 3D ⓘ
- ✓ SeisSpace[®] Multicomponent ⓘ

Resources:

- ✓ Appl Delivery : Linux Workspace
- ✓ Site Manager / Master Node : r5.2xlarge
- ✓ Shared Storage : 16 TB EBS (NAS, r5.2xlarge)
- ✓ Additional Nodes On-Demand : c5.12xlarge, 1 TB EBS Scratch
- ✓ Workspace Storage : 500 GB EBS Scratch
- ✓ File Transfer Storage (sftp) : 5 TB
- ✓ Computing Node : c5.12xlarge: 48 vCPU, 96 GB RAM
- ✓ Additional Storage On-Demand : 16 TB shared space configured via NAS

*NAS reserves some storage space to avoid performance degradation.



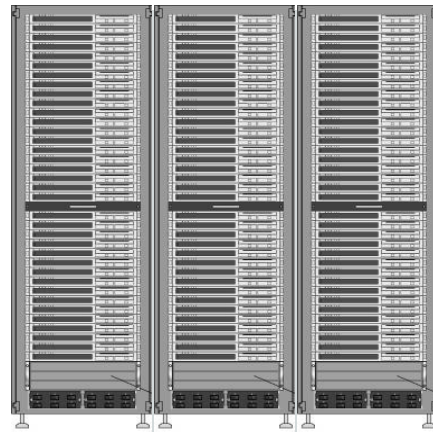
Seismic Processing

- On-demand resources via a turnkey processing center
- A full suite of geophysical tools with customizable machine learning tools

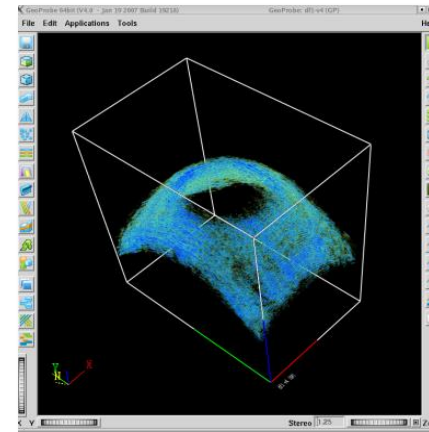
Easy to Use



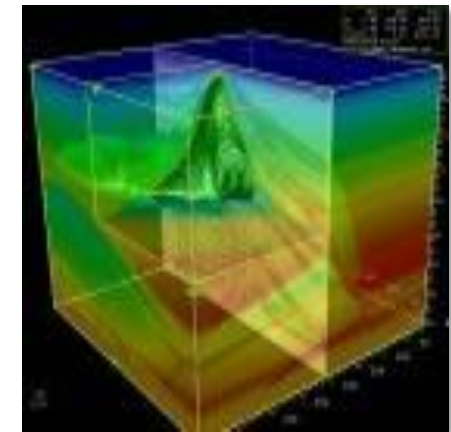
Parallel Performance



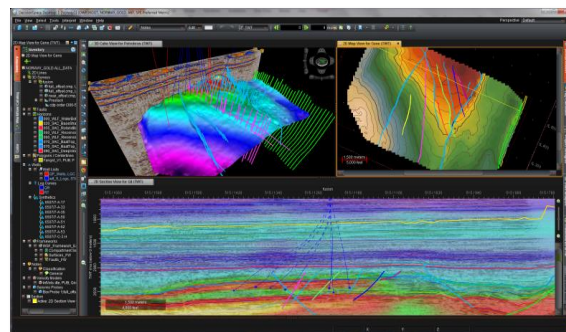
Visualization



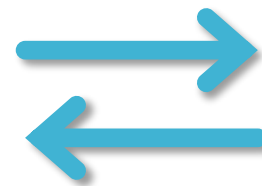
Geophysics



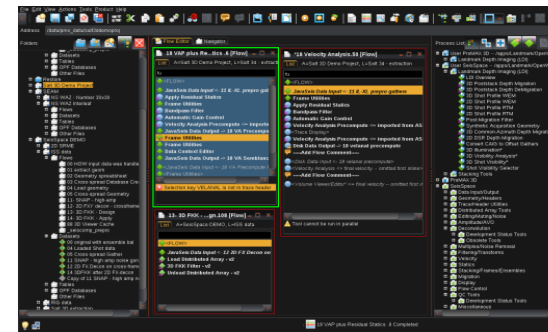
Interpretation



Integration



Processing



Scalable and Operationalized AI/ML solutions




DS365.ai

provides enterprise capability and scale by empowering you to rapidly train pre-built models or create and deploy innovative ML (Machine Learning) solutions into operations to enhance subsurface, drilling and production workflows. It achieves this by overcoming industry challenges to design, develop, and deploy models at scale with unified DataOps, simpler MLOps and streamlined DevSecOps.

DS365.AI 🔔 👤

Welcome to DS365.ai, Chidozie Manage Subscription

Halliburton (1)



DS365.ai


R & D Data Science RUNNING

R & D Data Science

[ML Studio](#) [Model Builder](#)

- **DS365.ai Applications**
- **Customizable Pre-built Models**
- **Model Building and Deployment**


Services For You



APP Development

DevSecOps to assist with your software development lifecycle


- [Developer Documentation](#)
- [Plug-in Exchange](#)
- [API Central](#)



Data

DataOps for automated data management and data quality control


- [Data Ingestion](#)
- [Data Management](#)
- [Data Service](#)
- [Data Quality](#)



Model

MLOps to create, deploy, manage and run innovative ML solutions to enhance E&P workflows

- [DS365.ai Marketplace](#)
- [Model Builder](#)
- [ML Studio](#)



Learning Central

Digital content to guide you to use DS365.ai on building, training & evaluating ML models

- [Video Library](#)
- [Sample Notebooks](#)
- [Documentation](#)
- [FAQs](#)

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Integrated E&P workflow and DS365.ai



iEnergy®

E&P Workflow Integration Solution Architecture

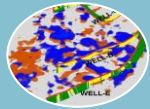
Teams & workflow



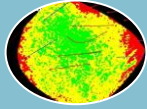
VDR

Application Foundation

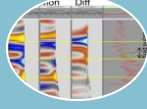
DS365.ai



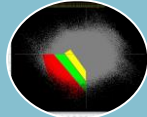
Volumetric interpretation



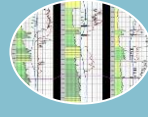
4D



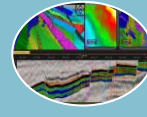
Fluid substitution



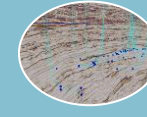
AVO Prestack



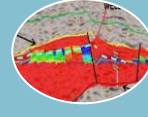
Geologic interpretation



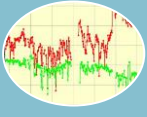
Reservoir characterization



Well Planning



Simulator



Production

Integration Foundation

Virtual Databases



Connectors



Data Transfer



Data Quality



Data Security



Information Foundation



Geoscience Databases



3rd Party Databases



Real Time Data



Unstructured Data

VDR as a Data Room

VIRTUAL DATA ROOM

DecisionSpace[®] 365
Powered by iEnergy[®]

HALLIBURTON | Landmark

Comprehensive Toolkit

- Rapid evaluations
- Due diligence





THANK YOU