INTViewer 2023
Features and Architecture Overview

INTVIEWER 5.4 2023.1

INTViewer Architecture

- CLIENT APPLICATION
- PRIVATE PLUGINS
- PUBLIC PLUGINS
- INTVIEWER
- NETBEANS PLATFORM
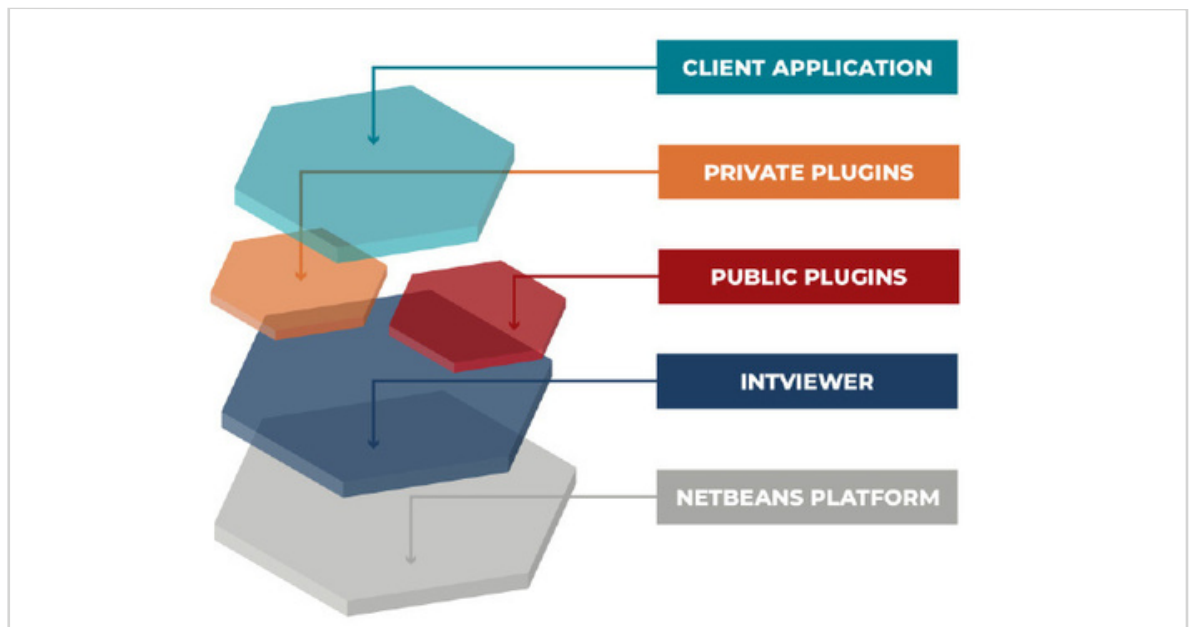
Interactive Visualization

Navigation Features

Immediate visualization with no project setup

Synchronization between views

Support for multiple screens/windows

Launch several instances side by side

Visual navigation through data

Variable Trace Spacing (distance or position)

Overlay multiple datasets in one view

Overlay seismic with different steps

Keymaps, shortcuts

Click, drag and drop, menus, dialogs, wizards, flexible window system

Interactive visualization manipulation (pointing, clicking, selecting, dragging, dropping)

Create personalized profiles for views

Undo/redo

Remembers paths

Has color maps ready to use

Session management (user defined, save & restore live sessions)

Sharing capabilities for user saved sessions

Print capabilities (CGM, PDF, Image Export)

Live Presentation/Slideshow

Slideshow capabilities to combine PPT with live visualization

Export to Excel

Formatted export to Microsoft Office (through Python scripting)

Export to Google Earth Sessions

Lattice Decimation

Screen captures

Animation (movies)

Adapts to showrooms

Dynamic annotations

Types of Visualization

Geoscience

Seismic (2D lines, 3D volumes, gathers)

Horizon

Pointsets

WellLog

Microseismic

Faults

GOCAD

VTK

Grid Surface

GIS (shape files)

Reservoir

3D Views

Display seismic, inline, crossline, time slice, arbitrary line

Display Horizons

Display reservoir

Display Well Trajectory

Switch between free camera and follow cursor mode

Display cylinder log

Clipping

Map

Support for Web Map Tile Service (WMTS): Google, Bing, OpenStreetView...

Support user-defined WMS server (via RemoteMap plugin)

On-the-fly conversions between CRS

Create RMS maps

Automatic detection of corner point geometries (seismic, horizon)

Coordinates conversion tool

GIGS compliant

Export to Google Map format : KMZ/KML

Import from and Export to GeoTIFF (via plugin)

Measure areas

Display Time slices

Display seismic lines

Display wellhead location

More Than 65 Plug-Ins

Mineral Rights

Slideshow

SSH: connect to a python terminal using a SSH client

Comments

Gradient Curve

Stacked Curve

Stacked Fills

Log Bar

Casing markers

Images

Horizon Attribute Extraction

Remote Map (including customer-defined WMS servers)

OpenVDS 3.3.0

GigaReservoir

MatlabCore

ZGY Data

Python Filter

Space Mouse Adapter

Lattice Decimation

Reservoir

Text

Signal-to-Noise Analysis

AngleField

Seismic Workbench

Velocity Measurement

Saddleback

Microseismic

Log2D visual

Seismic visual

AND MANY MORE ...

Data Analysis and QC

Data Management

Convert files from one format to another

Save subsets to disk (by range, polygonal area, or abitrary traverse)

Supports many variations of industry formats

Supports local and remote data

Supports very large datasets (Petabytes)

Data editing: Add missing traces, remove empty traces, resample

Access numeric data (trace samples, trace headers, log curves). Includes export to CSV

Access EBCDIC header, binary header

Normalize data, move headers, change sample formats, change EBCDIC header, etc.

Calculate well trajectories from log cur ves

Analysis

Spectrum

FK, FT, FX

Cross-Plot: includes trends, linear and logarithmic, histograms, dynamic f iltering

Signal noise ratios

AngleField

Calculator (Seismic and horizon)

Histograms (can export outliers)

Playback microseismic acquisition

Mutes

Interpretation

Horizon Picking and Editing (merge)

Fault Picking

Attribute Extraction

4D

Velocity Measurement

Extended Well

Well format allowing heterogeneous Z colums for log curves

Well meta data and log curve edition

Time/Depth conversion for curves and markers

Import/Export with LAS format

Processing

SU Integration built-in processors

Library Many

Platform

Extensible Platform

Works on any OS

Easy to install

Multiple enterprise deployment options (local, shared, mixed)

Multiple licensing options (machine, user, shared)

UI can be customized to fit in-house workflows

Can be customized to fit custom file formats

Can be customized to include your proprietary algorithms

Automate workflow with Python (Python editor agnostic)

AutoCompletion in Python Terminal

Seamless integration with NetBeans IDE

Includes both high-level and low-level API

Documented

API, developer documentation for both Python and Java

Online updates (can be disabled)

User documentation

Marketplace to sell your science as plugin

Geoscience plugins from other vendors

White label / Branding support to build your specialized application

Lithology Support Integration

Extended Well Data

Works with J/Geotoolkit (3.10 Release)

Licensing Management

Flexible license manager

UI to control token borrowing (plugin available in the update center)

Integration with Other Systems

Seismic UNIX

Petrel Seismic Files (ZGY)

DecisionSpace projects

Remote Control from other systems

Part of INTGeo ecosystem (IVAAP)

Multiple picking options, including auto picking

INTGeoServer

INT Empowering Visualization