

BaselineZ Features | version 2025.1

BaselineZ XR Applications - All Devices

- The following new datatypes are now supported in BaselineZ, including all import, visualization and display settings
 - * 2D Seismic
 - * Geological Targets (Point, Rectangle, Elliptical, Cylindrical, Polygon)
 - * Boundary Polygons
 - * Fluid Contact Surfaces
 - * Volume Maps Surfaces with attributes
 - * Micro Seismic pointsets with attributes
 - * Image Cross Sections (based on polyline with geo referenced image) [Figure 1](#)
- Petrel colorsets are used from to ensure similar color displays for all 3D and 2D Seismic, 3D Grid Properties, Surface Attributes and Well Logs [Figure 2](#)
- Display Settings Enhancements
 - * Well names can be displayed at top, bottom or at specific depth along the wellbore
 - * 3D Grid Slices have a special shadow strength slider to optimize 3D Grid slice lighting
 - * Surfaces have a special lighting strength and brightness slider to optimize the Surface lighting [Figure 3](#)
- Vertical Scaling visualization enhancement
 - * When vertically scaling the 3D Model stays focused inside you view area (e.g. at eye-level)
- 3D Grid visualization updates
 - * Properties with undefined values (both continuous and dictionary) are displayed with grey colors
 - * Vertical I and J Slices and Fences shown with more bright colors (available in Display Settings)
- Surface visualization updates using texture images
 - * Surfaces can be displayed using a vertically projected texture image (e.g. for example a map)
 - * Surfaces (e.g. Outcrops based on OBJ + image) can be displayed using texture with uvx and uvy coordinates
 - * Vertical Cross Section surfaces (based on Polyline + image) can be displayed using a texture image along a vertical plane
- 2D Well Logs visualization updates
 - * Default setting changed from 3D Cone to 2D Lines
 - * Can be rotated 360 degrees around the wellbore to optimize display location and direction
- Vertical Scaling factor taking into account to properly visualize
 - * Wellbore trajectory cones
 - * Logs cones and lines along wellbores
- 3D Probe improvements for various items (including MD, Inc, Azi, DLS etc):
 - * Well trajectories
 - * Geological Targets
 - * Well logs
 - * Well design control points
- Various Defect Fixes (See for more details Release notes)

BaselineZ HEAD Applications - Meta Quest / HTV VIVE Pro / HoloLens / IGLOO / PCVR

- Additional Geomodel Settings are made available through Project Settings
 - * Lock 3D Model
 - * Free Rotation of 3D Mode around all axis
 - * Vertical Scaling options
 - * Reset 3D Model Location, Scale and Rotation
- Completely redesigned Concept Modeling UI and Interactions implemented. [Figure 4](#)
 - * Available for Well trajectory planning, Geological Target creation and placements, fault and horizons modeling
 - * New editing context menu options to Well Control Point placements and editing
 - * New editing context menu options to Geological Target placements and editing
 - * Cloning options for existing Wells and Geological Targets from Petrel (or other data sources)
- New options added in the Main Menu
 - * New Concept Modeling available in tools
 - * Explicit project save option
- 3D Grid Filtering available through context menu using dictionary properties like zones and segments
 - * Single or multiple discrete properties can be used as filter
 - * Display any other 3D grid property while enabling the filter (for example Porosity in a certain Zone)
- Various Defect Fixes (See for more details Release notes)

BaselineZ IGLOO Applications - IGLOO Vision

- The BaselineZ Main Menu is now available on the Igloo Wall to quickly access all tools
- The BaselineZ Project Panel is now available directly on the Igloo Wall to quickly select new projects and access all project and application settings
- Additional Igloo Settings are made available. [Figure 5](#)
 - * Enable or disable player movement inside Igloo Spaces (default = off)
 - * 3D Stereo Mode on/off (default = off)
 - * Eye Distance Slider for 3D Stereo Mode (default = 0.1)
- Improved ICE Controller behavior for Panning, Scaling and Rotation
- Concept Modeling Tools available for Igloo to interactively create and model
 - * Well trajectories, Geological Targets, Faults, Horizons and Anti-Collision planes between 2 wellbores
- IGLOO application can be connected to BaselineZ On Prem Server with a shared data location to optimize performance
- Various Defect Fixes (See for more details Release notes)

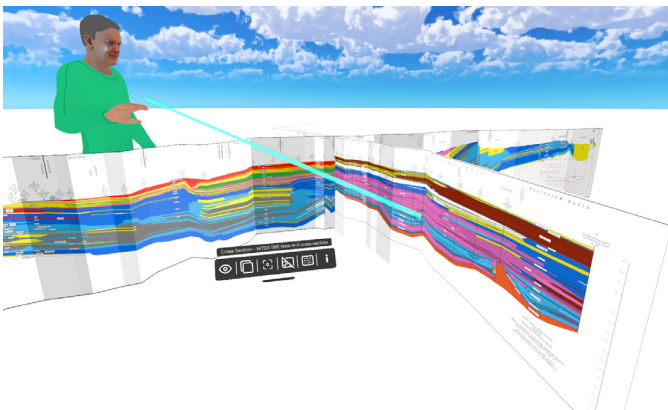


Figure 1 Image Cross Sections

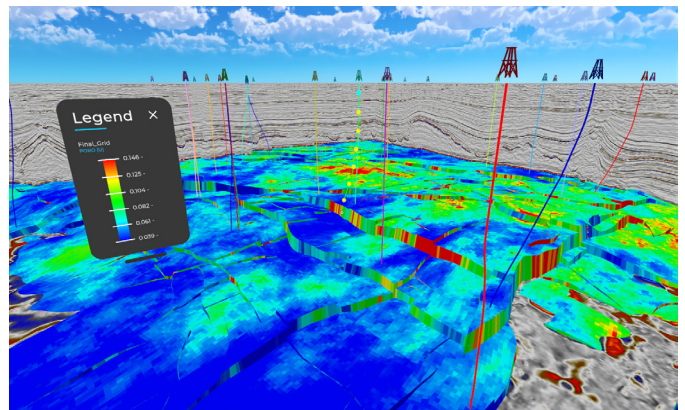


Figure 2 Petrel Colorsets

BaselineZ PCVR Application

- PCVR application can be connected to BaselineZ On Prem Server with a shared data location to optimize performance
- Various Defect Fixes (See for more details Release notes)

BaselineZ Petrel Plugin

- The following new datatypes are now supported in BaselineZ
 - * 2D Seismic
 - * Geological Targets
 - * Boundaries
 - * Volume Maps
 - * Fluid Contact Surfaces
- Geo Referenced Images can now be attached to
 - * Surfaces, which will display a vertically mapped image on the surface in BaselineZ
 - * Polylines, including ZMin and ZMax, which will create an Image Cross Section along the polyline in BaselineZ
- Colorsets for all item properties, attributes and logs are pushed to BaselineZ Server to ensure similar colorset visualization in BaselineZ
- Additional project settings for pushing Wells and Logs to BaselineZ Server
 - * Specify max number of stations per wellbore
 - * Specify max number of values per welllog
- Reconcile between Petrel Project data and BaselineZ Project data is further optimized to speed up performance to BaselineZ Server
 - * By utilizing item and properties Version IDs
 - * Only new and updated items and properties will be pushed to BaselineZ Server
- Direct Data Connector available for to directly in combination with BaselineZ On Prem Server (utilizing a shared local or network space to share data between Petrel and BaselineZ XR Visualization Applications)
- Bi-Directional Data Connector available for concept modelled items in BaselineZ [Figure 6](#)
 - * Available for Well trajectories, Geological Targets, Faults and Horizon surfaces
 - * Concept Modelled Items will show in the BaselineZ Publish Tree
 - * Concept Modelled Items can be imported using the Import context menu option for each item
- Various Defect Fixes (See for more details Release notes)

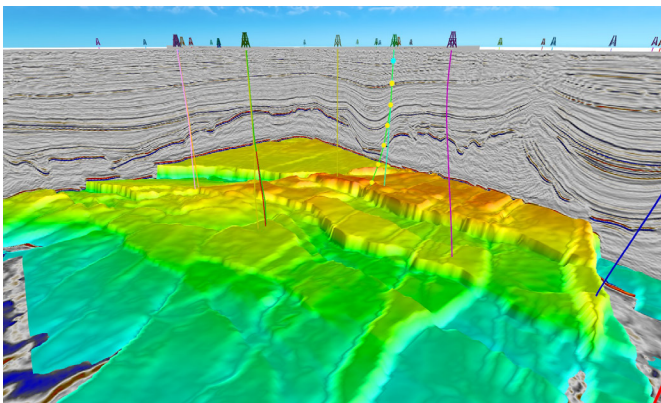


Figure 3 Surface Lighting

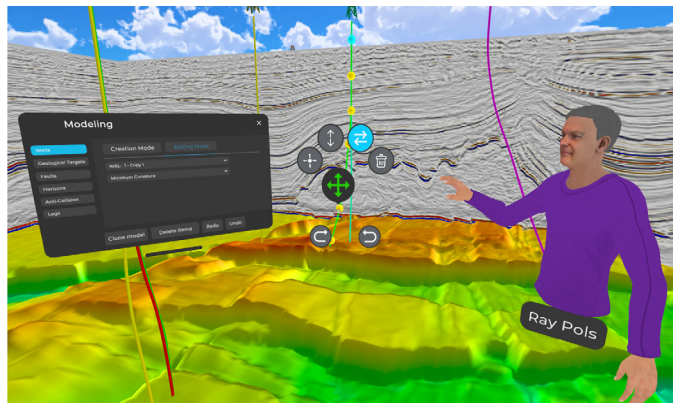


Figure 4 Concept Modeling

BaselineZ JewelSuite Addin

- OBJ file data import option as trimesh with uvx and uvy properties (for especially outcrop file with texture image import)
- Geo Referenced Images can now be attached to
 - * Surfaces, which will display a vertically mapped image on the surface in BaselineZ
 - * Polylines, including ZMin and ZMax, which will create an Image Cross Section along the polyline in BaselineZ
- Direct Data Connector available for to directly in combination with BaselineZ On Prem Server (utilizing a shared local or network space to share data between JewelSuite and BaselineZ XR Visualization Applications)
- Various Defect Fixes (See for more details Release notes)

BaselineZ RESQML Application

- Direct Data Connector available for to directly in combination with BaselineZ On Prem Server (utilizing a shared local or network space to share data between RESQML Application and BaselineZ XR Visualization Application)
- Various Defect Fixes (See for more details Release notes)
 - * Added support for 2D Grids + Cropping/Upscaling
 - * Added support for 2D Grid Properties (both Continuous and Discrete)
 - * Added support for Tri-meshes with multiple Patches + Properties
 - * Added support for Tri-mesh Properties (both Continuous and Dictionary)
 - * Added details panels for all supported RESQML items

BaselineZ CORE Application

- Direct Data Connector available for to directly in combination with BaselineZ On Prem Server (utilizing a shared local or network space to share data between CORE Application and BaselineZ XR Visualization Applications)
- Various Defect Fixes (See for more details Release notes)
- The Core Tray Image Tool is made draggable red outlines, to that its easier to select the Core Image area and extract the individual Core Images
- The Image Tools are made unit system agnostic, so these will work both in Meter or Feet and the resulting Core Image files will be unity system agnostic, so in either Meter or Feet for MD Start and End - When importing the Core Images in the Publish View the user need can specify the file import units Meter or Feet (available in Project Settings)
- For adding IP points, the user is able to specify either in Meter or Feet, to eliminate the requirement to manually re-calculate IP depth in Meters

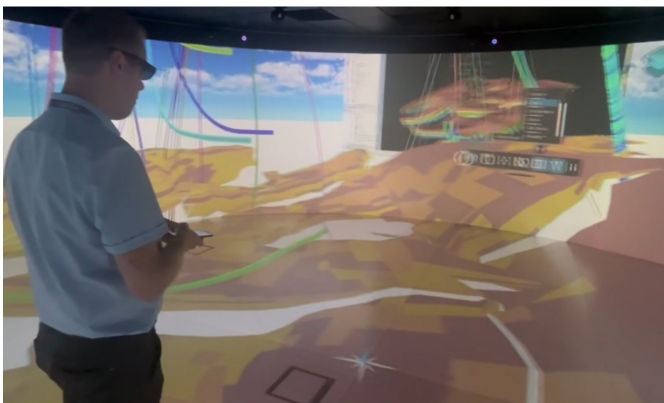


Figure 5 Full 3D Stereo Support

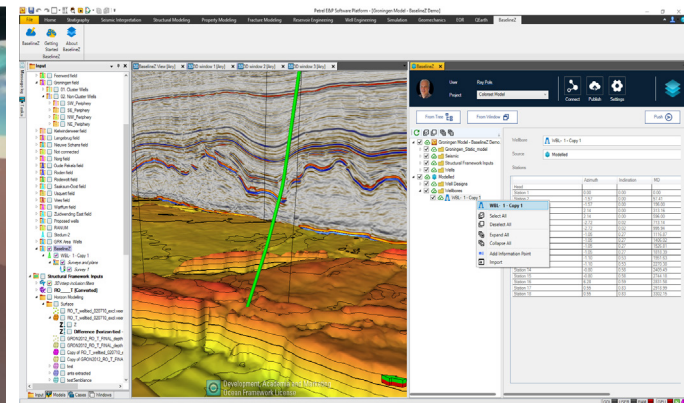


Figure 6 Bi-Directional Data Connector

BaselineZ Server / Web Portal - Microsoft Azure / On Prem

- A local or network storage folder location can now be used as shared storage space for BaselineZ On Prem server deployments which optimizes to overall project save and loading times
- On Prem Server deployment available as Windows Background Service and using Windows Installer
- Individual user access PIN codes don't need to be refreshed anymore after On Prem Server restart
- New supported datatypes are added to the Project Detail and Overview Pages
 - * 2D Seismic
 - * Geological Targets
 - * Boundaries
 - * Volume Maps
 - * Fluid Contact Surfaces
- Various Defect Fixes (See for more details Release notes)

For more information, contact us at info@baselinez.com or visit our website at www.baselinez.com

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