RockWorks is a comprehensive program that offers visualization and modeling of spatial data and subsurface data. Whether you are a petroleum engineer, environmental scientist, hydrologist, geologist, or educator, RockWorks contains tools that will save time and money, increase profitability, and provide you with a competitive edge through high-quality graphics, models, and plots.

Now 64-bit!
Download a full-functional trial version at www.rockware.com

Professional Applications for RockWorks include:

**Petroleum**
Well spotting, structural and isopach mapping, logs and cross sections, stratigraphic models and fences, production graphs  p. 3

**Environmental**
Borehole database for lithologic, stratigraphic, analytical data; point and contour maps, logs, cross sections, plume models  p. 4

**Mining**
Drillhole database for lithologic, assay, geophysical data; 2D and 3D log diagrams, block modeling, detailed volume tools  p. 5

**Geotechnical**
Borehole database for lithologic, geophysical, geotechnical data; logs, sections, surface/solid models, structural tools  p. 6

RockWorks Feature Levels
Buy just the tools you need! All are offered with Annual (Rental), Single or Concurrent (Network) Licenses. Starting prices are shown here. Bulk discounts are available

**RockWorks BASIC – Utilities and Logs & Log Sections**
$650 Rental | $1,500 Single | $2,625 Network
Create maps, models, charts and diagrams in 2D and 3D from spatial and structural data in the program datasheet.
Create 2D and 3D log and log section diagrams from sub-surface data stored in the borehole database.  p. 7

**RockWorks STANDARD – Borehole Modeling**
$1,300 Rental | $3,000 Single | $5,250 Network
Interpolate 2D and 3D models, create 2D and 3D maps, cross sections, block models and other diagrams from sub-surface data stored in the borehole database. (Includes all BASIC programs.)  p. 9

**RockWorks ADVANCED – Professional**
$2,200 Rental | $5,000 Single | $8,750 Network
Connect to SQL-Server databases, utilize powerful automation tools, 3D faulting, custom land grids, well production diagrams and the RockWare GIS Link.
(Includes all BASIC + STANDARD programs.)  p. 10

Etc...
What’s new, system requirements  p. 10
Petroleum Applications

Mapping Tools
- Structure and isopach maps: contour maps with lines and color fills, custom color tables
- 3D surface displays
- Bubble maps of any well data (production, etc.)
- Well and lease spotting from Range, Township, Section descriptions
- Land grid and lease maps with section boundaries
- Coordinate systems: longitude/latitude, UTM, State Plane, local, custom
- Well location maps: customized symbols (e.g. well status), plan-view horizontal well traces
- Gridding algorithms: kriging, triangulation, inverse-distance, trend polynomial, more
- Grid model tools: filters, math operations, editor, imports and exports

Well Database Tools
- Cross sections: hole to hole and projected
- 3D fence diagrams
- Correlations: model-based and “EZ” panels
- Horizontal and vertical wells: 2D and 3D, flexible log layout
- Stratigraphic modeling of all/selected formations
- Solid modeling of lithologic, geophysical, geotechnical, geochemical data, with display as voxel or isosurface diagrams
- Geosteering: optimal well paths based on target formations, lateral and 3D displays
- Well database for well locations and miscellaneous well data, formation contacts, raster images, geophysical data, lithology, well construction, production, and more
- Data imports—Excel, LAS, LogPlot, IHS, KGS, Tobin, other databases
- Stratigraphic contacts from digital elog data or raster logs

Other Tools
- Structural geology diagrams
- Graphic output: 2D and 3D output to RockWorks, Google Earth
- 2D editing tools: contour lines, text, shapes, legends, images
- Snapping tools for hand-drawn correlations
- Composite scenes in 3D with maps, logs, surfaces, solids, panels, surface objects
- Page layout program for small to large format presentations and posters
- Exports to GIS Shapefiles, CAD DXF, raster formats, Google Earth
- Image import, rectification, depth-registration
- Program automation
Environmental Applications

Mapping Tools

• Borehole location maps with detailed data labels
• Contaminant concentration maps with lines and color fills, custom color tables, date filters
• Plan- and surface-based slices from 3D models
• Stiff diagram maps
• Time-graph maps for user-selected analytes
• Potentiometric surface maps
• Flow maps in 2D and 3D
• Coordinate systems: Ion/lat, UTM, State Plane, local, custom

Borehole Database Tools

• Cross sections: multi-panel projected and hole to hole, with borehole logs and/or interpolated panels
• Correlations: model-based and “EZ” panels, snapping tools for hand-drawn correlations
• Borehole logs in 2D and 3D
• 3D fence diagrams
• Surface modeling of stratigraphic layers and water levels
• Plume modeling of analytical data, with display as voxel or isosurface diagrams, 2D plan and section slices
• Solid modeling of lithologic materials, geophysical and geotechnical measurements
• Volume reports of lithologic and stratigraphic models, contaminant extraction models
• Bulk data imports from Excel, text, LAS, other databases

Other Tools

• Time-based animations
• Piper and Durov diagrams with TDS circles, Stiff diagrams for multiple samples
• Water level drawdown diagrams and surfaces
• 2D editing tools: contour lines, text, shapes, legends, images
• Composite scenes in 3D with maps, logs, surfaces, solids, panels, surface objects
• Page layout program for small to large format presentations and posters
• Exports to GIS Shapefiles, CAD DXF, raster formats, Google Earth
• Image import and rectification
• Program automation
• Google Earth output directly from data: points, cones, lines, polygons, images, flyovers
Mapping Tools

- Drillhole location maps with detailed data labels
- Assay, concentration maps with lines and color fills, custom color tables
- 3D surface displays: topographic surfaces, stratigraphic units
- 3D point maps
- Geology maps: plan or surface-based slices from block models
- Multivariate maps: pie chart, bar chart, starburst, spider maps
- Coordinate systems: longitude/latitude, UTM, State Plane, local, custom

Borehole Database Tools

- Projected cross sections showing drillhole orientation
- Correlation panels: stratigraphy, lithology, grade/concentration, geophysics
- Drillhole logs in 2D and 3D with lithology, stratigraphy, bargraphs/disks, curves, color intervals, text
- Block model interpolation from XYZG point or drillhole data, display as voxels, isosurfaces, fence diagrams, 2D plan and section slices
- Surface model interpolation of stratigraphic units
- Downhole fracture display and modeling - closest fracture and closest fracture intersection
- Volume reports of lithologic, stratigraphic models
- Data imports: Excel, LAS, acQuire, Newmont, other databases

Other Tools

- Block model editor: 3D voxel/polyhedron editor, or slice-based
- Volume calculations: grade statistics by level, extraction reports, GT calculators, floating cones model extraction tools
- Stereonet and rose diagrams, stereonet and rose maps
- Ternary diagrams, frequency histograms for source data and models
- Graphic output: 2D and 3D output to RockWorks, Google Earth
- 2D editing tools: contour lines, text, shapes, legends, images
- Composite scenes in 3D with maps, drillhole logs, surfaces, blocks, panels
- Page layout program for small to large format presentations and posters
- Exports to GIS Shapefiles, CAD DXF, raster formats, Google Earth
- Image import and rectification
- Program automation
Mapping Tools
- Multiple components in piechart, spider maps
- Point maps with detailed data labels
- Topographic contour maps with lines and color fills, custom color tables
- 3D surface displays
- Strike and dip maps in 2D and 3D
- Coordinate systems: longitude/latitude, UTM, State Plane, local, custom

Borehole Database Tools
- Cross sections: multi-panel projected and hole to hole, with borehole logs and/or interpolated panels
- Correlations: model-based and “EZ” panels, snapping tools for hand-drawn correlations
- Borehole logs in 2D and 3D
- 3D fence diagrams
- Surface modeling of stratigraphic layers and water levels
- Solid modeling of lithologic materials, fractures, and geophysical, geotechnical, geochemical data, with display as voxel or isosurface diagrams, 2D plan and section slices
- Geology maps: plan slices from stratigraphy or lithology models
- Volume reports of lithologic, stratigraphic, excavation models
- Fracture display and modeling, stereonet maps, rose diagram maps
- Munsell colors for display in logs and interpolation into color models
- Data imports: Excel, AGS, Colog, Fugro CPT, glINT, LAS, Penetrometer, other databases

Other Tools
- Sieve diagrams, ternary diagrams with classification overlays
- Stereonet and rose diagrams
- Slope/aspect analysis on grid models
- Predictive tools: lithology materials from curves, interval data (porosities, strength, cohesion) from lithology
- 2D editing tools: contour lines, text, shapes, legends, images
- Composite scenes in 3D with maps, logs, surfaces, solids, panels, surface objects
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Other Tools

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RockWorks Feature Levels

<table>
<thead>
<tr>
<th>License Level</th>
<th>Basic</th>
<th>Standard</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single License Price Starting at</td>
<td>$1,500</td>
<td>$3,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Network License Price Starting at</td>
<td>$2,625</td>
<td>$5,250</td>
<td>$8,750</td>
</tr>
<tr>
<td>Annual Rental Price</td>
<td>$650</td>
<td>$1,300</td>
<td>$2,200</td>
</tr>
<tr>
<td>Utilities (including EarthApps)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Logs &amp; Sections</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Borehole-Based Modeling</td>
<td>—</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>SQL Server, Automation, 3D Faulting</td>
<td>—</td>
<td>—</td>
<td>✓</td>
</tr>
</tbody>
</table>

RockWorks BASIC

RockWorks Utilities

Enter a variety of spatial or sample data into the datasheet and create maps, models, charts, and diagrams in 2D and 3D—an indispensable collection of mapping, modeling, and display tools.

Data Management Tools

- Built-in Project Manager for easy access to data and output files in your project
- Flat, spreadsheet-style datasheet for entering row and column spatial data
- Multiple column types—spatial data, graphical items, file links
- Numerous data import and exports: Excel, text, shapefiles, GPS points/tracks
- Coordinate conversion tools: longitude/latitude, UTM, US State Plane, local coordinates; 30+ datums; convert US Public Land Survey (range/township/section) locations using the free RockWorks “LandBase”
- Field Data interface for entry and processing of data from tablet devices
- Digitizer for capturing points from scanned maps

Program Output

- Point Maps
- Land Grid Maps (PLSS)
- Grid Modeling and Editing
- Contour Maps and 3D Surfaces
- Solid (Block) Modeling and Editing
- Volumetric Reports and Diagrams
- Survey Tools
- Statistical Tools and Graphs
- Hydrology and Hydrochemistry Diagrams
- Structural Diagrams and Calculators
- Image Tools
- Coordinate Conversions
- 3D Infrastructure and Shapes
- Google Earth Apps
Data Management Tools

- SQLite or MDB database for storing downhole lithology, stratigraphy, analytical, geophysical, geotechnical, structural, water level, color and well construction data
- Project Manager for easy access to data, models, and graphics in your project directory
- Interactive depth-registration for raster logs
- Stratigraphy and lithology contact pickers
- Simple and complex data queries
- Excel, AGS, LAS, IHS, KGS, Tobin WCS, LogPlot, gINT, Fugro CPT, database, text imports
- Excel, LogPlot, Shape, Google Earth, text exports
- Borehole location and measurement units in feet or meters
- Local, UTM, U.S. State Plane, PLSS coordinates
- Easy customization of the borehole location tables to include any kind of reference information

Program Output

- 2D logs, log profiles, projected sections, and hole-to-hole cross sections; 3D logs
- Simple stratigraphy, interval-data, and point-data correlation panels
- Click and drag log designer for 2D and 3D log layout
- Inclined and horizontal logs in both 2D and 3D
- Interactive map for selecting profile and cross section locations or for importing from saved lists in the database
- Background images in section location maps
- Hand-drawn correlations with new snapping tools
- Borehole location maps with detailed data labels, miniature logs, non-vertical well traces
- XYZ coordinates from borehole surveys
- Optimal well paths based on XYZ points
Enter borehole or well data into a database and create 2D and 3D maps and models, cross sections, fence diagrams, isosurface and voxel diagrams. (Also includes all BASIC Level features, previous pages.)

**Data Management Tools**
- All of the borehole database tools, imports, exports from BASIC Level (previous page)
- Geotechnical values from lithology data
- Lithology prediction from curve data
- Uranium grade computations based on gamma counts
- Curve data resampling

**Program Output**
- Surface-based modeling of stratigraphy and aquifer data
- 2D iso-concentration maps based on downhole water and soil chemistry information
- 3D solid modeling of lithology, analytical, assay, geophysical, geotechnical, fracture, vector, and color data
- 2D cross sections, profiles, projected cross sections, and contour/geology maps slicing through all model types
- 3D fence diagrams slicing through all model types
- Numerous gridding and solid modeling algorithms
- Model filtering based on value range, spatial boundaries, other models
- On-the-fly volume calculations of surface-based and 3D solid models
- Detailed volume reports from stratigraphic and solid models
RockWorks ADVANCED
Professional Level

Offers all of the features of BASIC and STANDARD, described on the previous pages. AND includes these professional features...

Data Management Tools
- All of the data tools from BASIC and STANDARD
- Support of MS SQL-Server databases
- Import commercial (PLSS) landgrids

Program Features
- Program Automation/Scripting: The RockWare Command Language (RCL) is a powerful tool for automating program operations and is very easy to use. It's indispensable for projects which require multiple models and diagrams, receive new data, and/or need QA/QC tracking of settings. No programming required!
- 3D Faulting: Define single or multiple fault polylines with dip/direction/extent and use these for modeling of surfaces or solids to create fault barriers.
- Store well Production data in the database and generate production diagrams in 2D, 3D and Google Earth.
- Includes the RockWare GIS Link

What's New
- 64-bit processing for larger, higher-resolution models
- Multi-threading for faster modeling
- 3D Faulting for solid (block) models, surface models, and stratigraphy models
- New QuickMap view for borehole locations
- SQL Lite (default) or MDB for local databases
- Production table in database and full suite of well production diagrams
- GeoBody filter for grouping block model values

System Requirements
- Windows 7, Windows 8, or Windows10
- RockWare Network License Administrator (for Network license) requires Windows Server 2003 or higher
- 64-bit operating system
- 2+ GB RAM