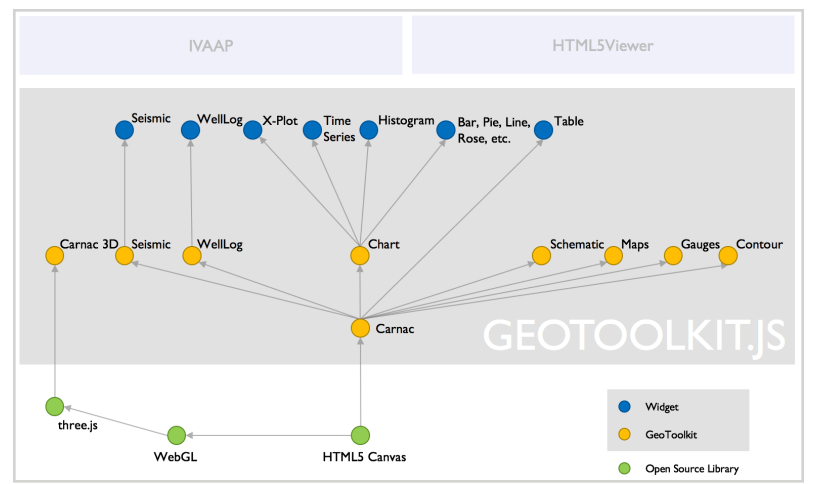


# GeoToolkit.JS Features and Architecture Overview

Version 2.6



GeoToolkit Architecture

## E&P Libraries and Widgets

WellLog		Seismic		Schematics		3D	
<b>WellLog Visuals</b>	<b>WellLog Widget</b>	<b>Widgets</b>	<b>Data Processing</b>	<b>Display Features</b>	<b>Display Features</b>		
Log curve	Display single well log data	Seismic widget	Interpolation (linear, quadratic, step)	Linear or compressed	Grid		
Discrete curve	Vertical or horizontal view	Seismic widget with trace header table	Normalization (maximum, average, RMS, specific limits)	Vertical or deviated	Compass		
Tick curve	Template support	Seismic widget with auxiliary graph	Taper filter	L-shaped	Three.js library integration		
Value curve	Interactive tool support	Trace headers table view	Automatic gain control	Multi-string	Different cameras		
Gradient curve	Time or depth-based data	Annotations overlay	<b>Data Formats</b>	High-quality SVG symbols	Well trajectory		
Stacked curve	Real-time support	<b>Display Features</b>	SEG-Y	Labeling and annotations	Log curve: cylinder or 2D		
Fill between two curves or base line	PDF printing	Wiggles	Memory data source	Real-time	Log fill		
Gradient fill	Custom header/footer	Positive and negative fill	Remote data source	Fluid levels	Array log		
Stacked fill	<b>Headers</b>	Variable density with custom color map	INTGeoServer integration with trace decimation and data compression	Lithology	Well annotations		
Marker (tops)	Curve	Trace headers	Custom source	Well log track	Vector object		
Lithology	Fill	Variable trace spacing	<b>Real-Time Support</b>	Options to integrate with your own schematics elements library (vector or raster images)	Surfaces		
Annotations	Lithology histogram	Waveform pattern	Real-time traces	<b>Widgets</b>	Height maps		
Array log	Track	Decimation and clipping	Waveform	Widget schematic	Seismic slices		
Tadpole	Collapsed	Vertical or horizontal view	DTS acquisition	L-Shape schematic widget	Seismic overlays		
Rose diagram	Composite	Trace headers table	Shot monitoring	<b>Contour</b>	Pointset (microseismic)		
Density log	Custom/third-party headers	Time slices in base maps	<b>Export</b>	<b>Display Features</b>	2D map		
Image log	<b>Tracks</b>	Auxiliary graph	CGM+	2D/3D	Animations		
Raster log	Linear	Base map		Isolines with labels	Picking		
Core image	Logarithmic	Overlay support		Smoothing	Reservoir grid		
Cross-section	Axis	Variable trace spacing		Label collision detection	Schematics		
Waveform (requires seismic module)	Navigation			Colormap-based fill	VTK formats		
Custom/third-party visuals	<b>Deviated View</b>			Faults	Seismic volume support		
<b>Correlation Widget</b>	Deviated view (existing visuals)			Overlays			
Display multiple wells	<b>Misc</b>			<b>Types</b>			
Supports header/footer	Responsive (level of details)			Regular rectangular grid			
<b>Data Formats</b>	Annotation overlay			Arbitrary triangular grid			
LAS	LAS 2 writer						
Data Object Model							

## Generic Libraries and Widgets (CARNAC Modules)

Base 2D Graphics		Charts		Maps		Gauges/Alarms	
<b>Scene Graph: Graphical Primitives</b>	<b>Axes and Grids</b>	<b>Misc</b>	<b>Types</b>	<b>Display Features</b>	<b>Display Features</b>		
Line/polyline	Regular interval	Color bar	Area	Support for different layers	Circular		
Polygon	Adaptive (depending on current on zoom factor)	Legends	Bar	WMTS services: Google, MapQuest, ESRI, OpenStreet map, Bing	Half-circular		
Rectangle	Logarithmic	Color providers	Box plot	ArcGIS GeoServices (feature, map service)	Linear		
Ellipse	Time-based	Scrollbars	Bubble	ArcGIS web map	Numeric		
Arc	Automatic step and limits	Support of CSS styles	Donut	GeoJSON support	Digital		
Arrow	<b>Node Layout</b>	Persistence	Histogram	KML support	Traffic		
Generic path (bezier)	CSS	JSON schema	Table	GeoRSS	Multi-value		
Spline	Vertical/horizontal	Units	Pyramid	Stream service	Custom gauges		
Symbol	Grid	Transition animation	Line	CSS	<b>Time Series</b>		
Text	Annotated	Responsive style (supports level of details)	Pie	Limited Error Raster Compression format	<b>Display Features</b>		
Image	Margins and padding	HTML text formatting	Radar	Coordinate systems	Customizable time axis		
Tiled image	<b>Table Widgets</b>	Internationalization/localization	Rose	Vector tiles	Annotations		
Groups	Large dataset	<b>Generic</b>	Cross plot	Overlays	Overlays		
<b>Interactive Tools</b>	Sort	<b>Supported platform:</b> Mobile, Desktop (Chrome, etc.), Node JS	Stacked area	Symbols aggregation	Fill/fill between		
Cross hair	Cell editing	<b>Supported frameworks:</b> Angular, React	Tornado	Contour layer (requires Contour module)	Interpolation modes		
Rubber band	Custom cells	<b>Supported languages:</b> TypeScript, JavaScript	XY Line chart		Linear/logarithmic		
Point and area selection	<b>Data Source</b>		Heat map	<b>Reports</b>	Micro Positions		
Shape Editor	Data Series: represent a single series of values		Multiseries	<b>Display Features</b>			
Zoom in/out	Data Table: a group of data series organized as table		Peity (small charts)	Document Preview			
DOM tools	Data View: read-only sub view of data series/table		Treemap	PDF			
<b>Export Options</b>	Data Set: a set of data tables		Flow charts				
Image			Multi-histogram				
PDF			Linear / non-linear regression				
CGM			Regression line				
			Cross-section				
			Real-time support for all charts and widgets				