WellLink 3D Service
Optimize wellbore placement using real-time 3D visualization to maximize reservoir contact

The Baker Hughes WellLink™ 3D service optimizes wellbore placement by providing real-time, 3D visualization of wellbore related data for enhanced well planning, reservoir navigation, and directional drilling. This integrated decision support and visualization platform enables operators to make accurate and timely decisions within a true collaborative environment by aggregating data into a single visualization space.

Enhance wellbore placement
WellLink 3D services combine all the necessary data in a single platform for improved well planning. Using a 3D view of offset wells, prewell, fullfield earth models, and an anti-collision display showing no-go zones allows you to develop an optimal well plan through the pay zone. During drilling, the system updates the datasets used during well planning, allowing for change-of-trajectory decisions. Scenarios can be modeled and tested before they occur, enabling safer wellbore placement.

Reduce decision time
Integrating prewell drilling scenarios with real-time data provides an easy-to-grasp view of your drilling environment. Operators can visualize directional drilling, reservoir navigation, and drilling optimization data within geologic context, enabling real-time corrections of well trajectory and drilling parameters. Quickly spot inconsistencies between models and actual geologic structures allowing decisive, corrective action.

Create a collaborative environment
By leveraging the industry-standard protocol, WITSML, the WellLink 3D service provides a single, integrated decision support and visualization platform. With the ability to connect directly to other WITSML data sources, operators can visualize both off-line and real-time datasets. This integration makes collaborating between a rigsite and remote locations easier.

Applications
- Well planning and directional drilling
- 3D clearance calculations
- 3D reservoir navigation
- Drilling optimization

Features and Benefits
- Display complex reports and all wellbore-related datasets, as simple 3D visuals in real time
  - Enhance reservoir navigation and well placement by visualizing actual well path within geological context while drilling
  - Provide better understanding of available space between offset well paths for optimal anti-collision planning
- All relevant real-time trajectories and logs are displayed as they are acquired
  - Improve the understanding of real-time measurements in context to optimize drilling
- Aggregate datasets from multiple sources into a single, integrated space using WITSML
  - Reduce decision time through collaboration and shared data display
  - Seamless integration between existing data systems
By providing a better understanding of offset well paths and formation structure, the WellLink 3D service enhances your drilling projects by simplifying collaboration to mitigate downhole risk and avoid nonproductive time.

When real-time, 3D information is required for accurate wellbore placement, contact your Baker Hughes representative to learn more about how WellLink 3D services can improve your decision-making.

Minimum acceptable separation distance calculations are displayed in 3D. Tubes represent aggregation of positional uncertainty with anticollision rules (ACR) along offset wells with respect to the planned well in yellow. Areas safe to drill are shown as visible space: red areas indicate where ACR fails while green areas depict where ACR passes. Dumbbell symbols and connecting lines show the direction along ACR calculation between offset and planned wells.

A high-resolution resistivity image shown in context of a local earth model built in realtime. The illustration shows picked dips along the wellbore trajectory highlighting bedding and small faults within the reservoir, represented in blue and red, respectively. "Lollipop" symbols are color coded with respect to distance to bed.