

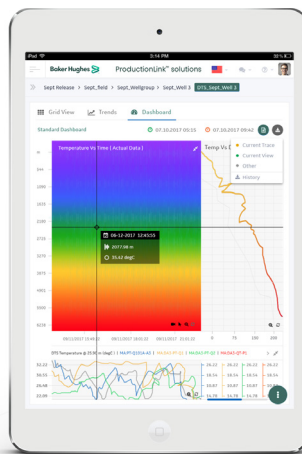
# ProductionLink optical solutions

Get the full value of your DTS, DSS, and DAS data to improve well performance

Combining fiber-optic distributed temperature sensing (DTS), distributed strain sensing (DSS) and distributed acoustics (DAS) data with other surface and downhole information can provide the insight you need to enhance production and make more informed operational decisions. But, current practices to manage this information are complex, costly, and time consuming, making it difficult to extract the full value of your data.

Baker Hughes recognized these limitations and developed **ProductionLink™ optical solutions** to make managing complex DTS, DSS, and DAS data faster and easier than ever before. Using a software as a service (SaaS) deployment method, Baker Hughes provides you with a flexible, web-based service that seamlessly transmits, stores, and visualizes data for quick access and analysis—anytime, anywhere. The interactive web interface lets you see temperature, strain, and acoustic readings across time and depth in each asset, enabling quick

identification of trends, patterns, and anomalies that can be used to diagnose downhole conditions, enhance production, and improve overall recovery. The dashboard provides integrated visualization of the different data types including data from DTS, DAS, well logs, well schematics, well trajectories, and more.



Monitor DTS profile changes 24/7 with remote access via tablets and mobile devices.

## Applications

- Monitoring of production, inflow, injection, and frac operations
- Gas lift status change alert
- Wellbore compaction
- Well integrity and event detection

## Benefits

- Allows users to easily and quickly share data for real-time analysis and post analysis
- Shows animation to view DTS trace updating in the temperature vs. depth during a specified period of time
- Enables different presentation of DTS data such as temporal temperature gradient (TTG) and spatial temperature gradient (STG)
- Eliminates the need for excess hardware, software, and licenses
- Identifies gas lift mandrels, visualizes line markers, and generates gas lift alarms

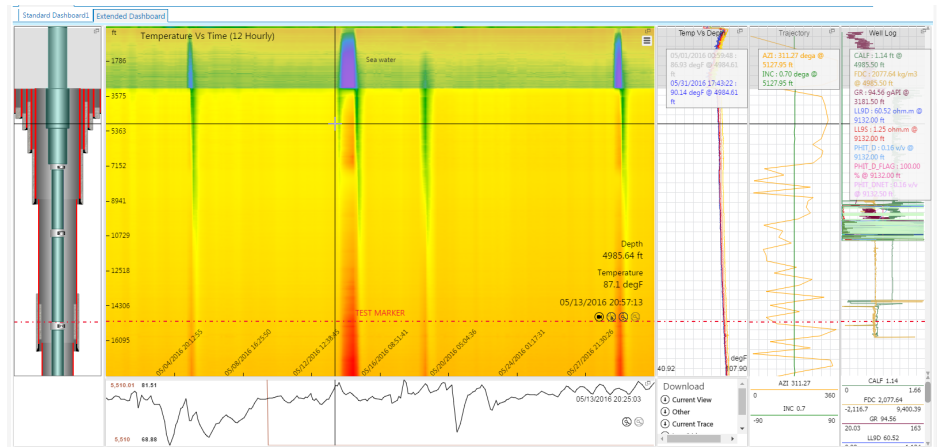
Traditional methods for managing downhole data—such as SCADA systems and file folder architectures—are easily overwhelmed by the large volume of data sets, causing delays that prevent real-time analysis and decision-making. And, without a uniform process and standardization to manage this data, the retrieval, calibration, and visualization of data is extremely difficult and time consuming.

ProductionLink optical solutions simplify the management and integration of data by using the production mark-up language (PRODML) DTS/DAS standards, enabling integration with common applications and compatibility across vendors. This allows you to quickly and easily share data, with the capability of tracking meta data and saving multiple versions without losing any raw data in the process.

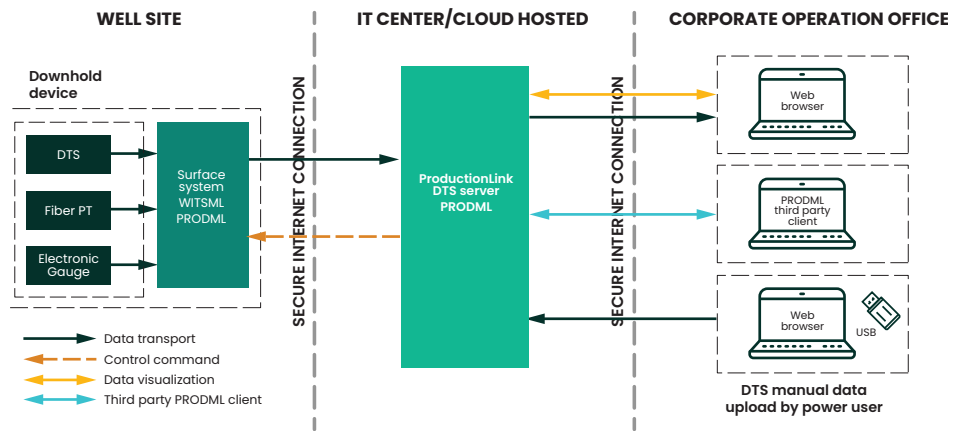
The service also transmits and stores high volumes of data in real time, providing you with instant access to complete sets of data along the entire wellbore. And, with the ability to integrate the DTS data with other surface and downhole information, you can gain more accurate and faster insights about your asset's performance. The service is also scalable, giving you the flexibility to track the performance of multiple fields, or just a few select wells.

Deploying the offering as a SaaS reduces your workload and costs by eliminating the hassle of excess hardware, software, and licenses. Baker Hughes provides technical support and can deploy updates automatically through the web. With this universal capability, you can gain a holistic view from multiple assets and applications within a single, easy-to-use interface.

Contact your Baker Hughes representative to learn how you can unlock the full value of your DTS, DSS and DAS data and improve well performance— faster, smarter, and more effectively.



The ProductionLink DTS dashboard view provides an overview of temperature data in 2D, showing both depth and time.



DTS data workflow