

# FIBEXplorer® White Paper

Company Name:	Sulzer GmbH
Product Type / Service:	Exploring and Analyzing FIBEX files
Target Audience:	<p>FIBEXPLORER targets the area where fully generic XML-Tools or ASCII-like Editors leave off due to their lack of semantic knowledge and fully integrated engineering solutions tend to seal users from the original data base, by concealing or even skipping parts of the relational FIBEX structure.</p> <p>A highly flexible, semi-generic and domain-aware data model faces up to the complexity of highly interconnected wiring data networks. At the same time an <i>intuitive</i> and <i>adaptive user interface</i> provides data-oriented and competent assistance in the acquisition, review and evaluation of real-world FIBEX, meeting the requirements of beginners and experts as well.</p>
Functionalities:	<p>FIBEXPLORER is primarily a versatile data browser presenting the constitutive entities by transparent embedding of their cross-link context.</p> <p>Moreover, FIBEXPLORER provides analytical and UI-based query facilities, for instance, filtering and grouping over attribute values and cross-link aspects. Its outstanding analytical power is driven by a consistent integration of the following fixtures:</p> <p><u>Link tracking</u>: On each element the entire <i>cross-link context</i> is available.</p> <p><u>Clustered navigation</u>: Allows simultaneous <i>traversal of element bundles</i> over arbitrary linkage layers, capturing the full context in highly interconnected data networks.</p> <p><u>Import wizard</u>: Assists users by extracting their <i>scopes of interest</i> from bus topology and Tx-Rx data. Related entities are marked for UI presentation, whereas unassociated ones are (optionally) <i>excluded from view</i>.</p> <p><u>Custom working sets</u>: Successive <i>scale down</i> of active working sets allows the interaction of top-down and bottom-up analysis necessary for the investigation of consumption of given data by selected operators.</p> <p><u>Set operations</u>: Supports <i>quantification related evaluations</i> like "Which entities violate given requirements with respect to interconnection and value based filtering aspects?"</p> <p><u>Interconnection matrix</u>: Tabular summaries let users spread out any kind of cross-linked data yielding <i>communication-related evaluations</i>.</p> <p><u>Plugin approach</u>: Complements to <i>domain specific enhancements</i> and additional analysis compatibilities, such as:</p> <p><u>Report Plugin</u>: Contributes ready-to-print visualizations on <i>schedule and layout</i> data as well as FLEXRAY <i>parameterizations</i> of connectors and clusters.</p> <p><u>Communication Plugin</u>: Extends FIBEXPLORER with a TX-RX PERSPECTIVE, complementing the vertical navigation capabilities (superior / subordinate) with a <i>horizontal navigation</i> (sent / received). This allows cluster wide <i>tracking of signal paths</i> and communication relevant <i>data propagation</i>.</p>
Supported ASAM Standards:	<p>AE MCD-2 (FIBEX), Complete V2#, V3# Standards,  All platforms: FLEXRAY, TTCAN, LIN and MOST as well as multiplatform GATEWAY models (FIBEX4MULTIPLATFORM).  Compatible with manufacturer specific enhancements and upcoming V3.x Versions.</p>
Web:	<a href="http://www.fibexplorer.de">www.fibexplorer.de</a>

## FIBEXComparer® White Paper

Company Name:	Sulzer GmbH
Product Type / Service:	Comparing and Analyzing FIBEX files
Target Audience:	FIBEXCOMPARER targets the area where fully generic XML- or ASCII-Diff-Tools leave off due to their lack of semantic knowledge. FIBEXCOMPARER accomplishes a concise comparison of highly interconnected wiring data backed on profound considerations of the respective element interdependencies.
Functionalities:	<p>Given two FIBEX files, FIBEXCOMPARER builds a highly flexible, semi-generic and domain-aware delta model capturing the full context in highly interconnected data networks. FIBEXCOMPARER extends the comprehensive analysis capabilities of <a href="#">FIBEXplorer</a> with a <i>semantic Comparison</i> for the entire FIBEX Standard (V2#, V3#).</p> <p>The user can navigate the calculated compare result in a familiar way. Added, removed or changed elements are displayed with their <i>full forward, backward or data context</i>, respectively.</p> <p>In the navigator, all elements affected by a data-change can be identified. Impacts on related networking and communication contexts become quickly evident, supporting system analysts in the <i>assessment of compatibility issues</i>.</p>
Supported ASAM Standards:	AE MCD-2 (FIBEX), Complete V2#, V3# Standards, All platforms: FLEXRAY, TTCAN, LIN and MOST as well as multiplatform GATEWAY models (FIBEX4MULTIPLATFORM). Compatible with manufacturer specific enhancements and upcoming V3.x Versions.
Web:	<a href="http://www.fibexplorer.de/html/comparer.html">www.fibexplorer.de/html/comparer.html</a>