

Modernizing ASAM ODS with Viviota

Viviota TTI™ bridges the gap between advanced engineering analytics and ASAM data sets

Compatible with ASAM standard interfaces and data formats

Connect and synchronize disparate time-series data sources

Automate existing engineering analytics from raw data to dashboards in a single workflow

Uncover high-impact data anomalies in ASAM data sets with TTI Analytics

Search and retrieve ASAM data down to the channel for further analysis

Integrate with existing data sources, analytics tools and external systems to enable larger workflows

Collaborate with Data Science teams around ASAM data

Work with data on premises and in the cloud

Today's engineers look to leverage their ASAM data sets with modern digital engineering techniques. Viviota Time-to-Insight™ (TTI™) software provides ASAM-compatible analytics, rich data search for on-demand analysis and a full suite of automation tools for repeatable analytics orchestration.

ASAM CONNECTIVITY

TTI accesses ASAM engineering test data through a variety of connection options. Connection options range from ASAM compliant file import to direct connection through ASAM standard interfaces such as web services, HTTP-API and RPC integration. TTI's optimized, high-performance analytics environment runs analytics against metadata and raw data and can push augmented outputs back into the ASAM database.

ASAM DATA COMPATIBILITY

TTI leverages the TDM data model (derived from the ASAM ODS standard data model) to work directly with ASAM data. TTI provides a three-level data hierarchy and allows for dynamic, on-the-fly schema updates for TTI's analytics. TTI can also incorporate data sets beyond ASAM in its analyses with a wide variety of built-in integration plug-ins covering thousands of common engineering data formats.

POWERFUL BUILT-IN ANALYTICS

TTI provides powerful Engineering Analytics out-of-the-box. TTI's Engineering Events analytics pinpoint and assess key patterns in ASAM data down to the channel-level. Powerful time synchronization features enable data synchronization across multiple sources. ASAM customers can view and extract all relevant data, from an anomalous moment in time, during a test for further analysis or to update existing models. TTI supports Machine Learning (ML) featurization workflows using a variety of statistical analysis functions, an extensible analytics plug-in architecture and a featurization workflow to train and execute advanced ML models.

EXTENSIBLE PLATFORM ACCOMMODATING CUSTOMER ANALYTICS LOGIC

Engineers can fully incorporate their existing analytics routines into TTI allowing end-to-end "data to analytics" automation and execution on more powerful TTI servers or cloud resources. TTI supports management and execution of Python, MATLAB, LabVIEW, DIAdem and VB analytics scripts through a robust plug-in architecture.



CONFIGURABLE ANALYTICS AUTOMATION

At its heart, TTI provides a powerful analytics orchestration and automation system. Through workflow creation, UIs and distributed execution of scripts on local and remote servers, TTI can execute all steps in a pipeline from data ingestion, transformation, multi-step analysis and automated report or dashboard generation.

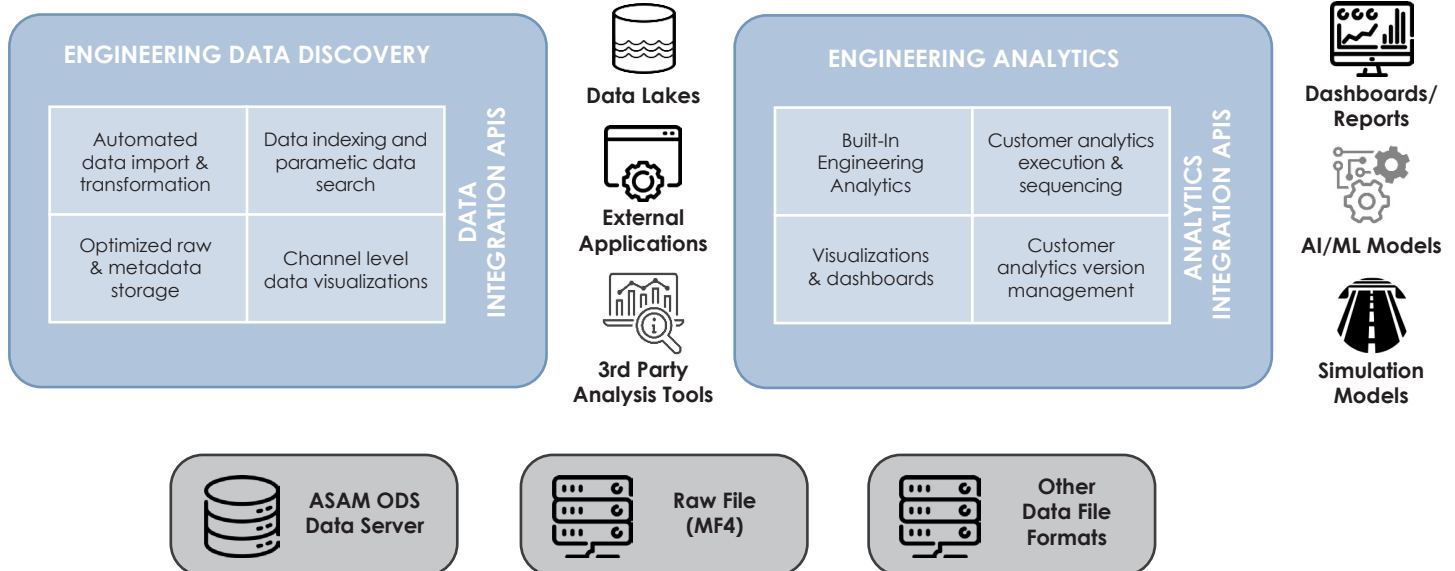
BUILT-IN SEARCH AND VISUALIZATIONS

For on-demand analyses, TTI provides powerful parametric search capabilities across raw data and metadata. Engineers can easily find relevant test data down to the channel and time window. Data export lets engineers use their favorite analytics tools, reducing training time.

ANALYTICS DASHBOARDS, REPORTS AND INTEGRATION APIS

TTI provides a variety of useful dashboards and reports out-of-the-box and rich integration APIs to move augmented test data and analysis to external systems supporting integrated engineering processes. TTI outputs can feed traditional Business Intelligence systems, Data Science platforms and Product Lifecycle Management systems.

VIVIOTA TTI REPOSITORY



Viviota has extensive experience with ASAM ODS implementations at the world's largest OEMs and is an active member of the ASAM standards organization and community. To learn more about modernizing ASAM-powered analytics, email info@viviota.com or learn more at www.viviota.com



MAKING SENSE OF SENSOR DATA

LEARN MORE: www.viviota.com