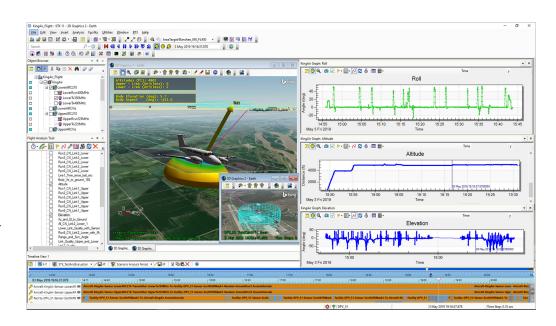




## **TETK**

Improve the efficiency and effectiveness of test and evaluation activities across the digital engineering product life cycle.

Test and Evaluation Tool Kit (TETK) supports test event planning, execution, and post-test data analysis for improved efficiency and effectiveness of test and evaluation activities. Build and validate detailed test plans, monitor test execution, and rapidly analyze post-test results to mitigate costs and reduce retest rates. Import your own unique system data to use alongside STK data and analysis artifacts. Monitor test execution in near real-time to make better decisions faster and replan on the fly.



## Use Cases

## **Pre-test planning**

- Predict quality of telemetry and command and control (C2) links
- Predict compliance with geometric, parametric, and physicsbased constraints.
- Refine test point sequences and orientations to increase test point density.
- Define measures of effectiveness and measures of performance.
- Coordinate temporal and spatial relationships of test assets across multiple domains.

#### **Test execution**

- Assess test point attainment in near real-time and replan your missions on the fly.
- Visually monitor the performance of mission systems, range assets, GIS data, and more.

#### Post-test analysis

- Accelerate analysis of program-unique datasets by automating data ingestion and the generation of key analysis artifacts (e.g., graphs, reports, 3D visuals plus time).
- Accelerate anomaly forensics by visually interrogating relationships between complex datasets.

- Fuse data from onboard systems, payloads, data links, and range sensors for a complete understanding of test execution and system performance.
- Perform track-to-truth matching and track comparisons to validate sensor performance.
- Assess test results relative to specifications.

# Key Value Points

- Maximizes test point density and reduces retest rates by analyzing timing and spatial relationships in test plans.
- Processes data quickly to enable immediate mission insights.
- Accelerates test performance assessments through comprehensive quick-look playbacks.
- Fuses data from onboard systems, data links, and range sensors for a complete understanding of test execution and system performance.
- Assesses whether previous test points have been achieved while subsequent test points are being executed, potentially saving money by enabling the retesting of failed points before the test sequence ends.
- Provides stakeholders with immediate insight into technical details through 3D visuals plus time, reports, and graphs.

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# / Core Capabilities

- Automated import of custom data sets. Custom and repeatable mappings of data fields from file formats such as CVS, text, and HDF5 to STK analysis parameters.
- Visualization techniques to make sense of complex data relationships. Four-dimensional globe visuals synchronized with interactive graphs and reports.
- Automated workflows to perform common test and evaluation analyses. Includes, for example, track-to-truth comparisons for sensor performance validation.
- Time tagging and data assignment mechanisms to help manage large datasets. Displays only the data relevant to a particular time window and analysis objective.

## / Technical Details

#### / Workflows

- Track to truth comparison. A workflow to set up and calculate geometric verification measures.
- Track automation workflow. Automation of the multiple steps in the process to ingest and analyze sensor tracks.
- Track events workflow. Automation of the steps required to evaluate radar queueing in conjunction with weapons events.
- Sensor volumes workflow. Visualize behavior of data-driven sensor volume.
- EW track ID workflow. Filtering of sensor tracks based on electronic warfare characteristics.
- Track measurements filtering and analysis. A workflow to create track measurement objects that enable you to assess and filter through visualization and decision-aid graphics.

