



# MDS Tool

The MDS (Maintenance & Diagnostic Solution) is a host-PC software designed to be compliant with STRATON embedded-software applications. This software utility tool enables railway integrators and operators to maintain Leroy Automation's BRIO and RIOM devices, and analyze all the mission-data recorded by them or by the tool itself, connected to them. It helps to diagnose and solve any vehicle problems in Train Control, Communication and Management Systems.

## Host-PC software

### MAIN FEATURES

- **System & Device Maintenance :**
  - Multi-device management,
  - Software diagnosis & upgrade,
  - Variables monitoring,
  - Event & log files management: upload & conversion.
- **On Line Analysis:**
  - Live visualization of any Straton variable,
  - Source time-stamping for a subset of variables.
- **Off Line Analysis:**
  - Logs analysis: curve view,
  - Events analysis: Filtering, bar graph & curve views

### SYSTEM & DEVICE MAINTENANCE

- **System view :**
  - Device list update & view.
- **Device management :**
  - Communication check,
  - Project maintenance: check, upgrade,
  - Firmware maintenance: check, upgrade,
  - Internal variables read & write.
- **Device Event & Log files management :**
  - Remote file list, upload & remove,
  - Remote memory usage visualization by a gauge,
  - Local file list, and treatment conversion.

### ON LINE ANALYSIS

#### Two modes are available:

- Live visualization & recording of any Straton variable,
- Live streaming & recording of any variable with source time-stamping at device cycle-time precision.

All data can be recorded in files stored onto the Host-PC.

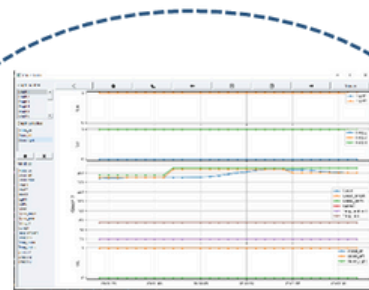
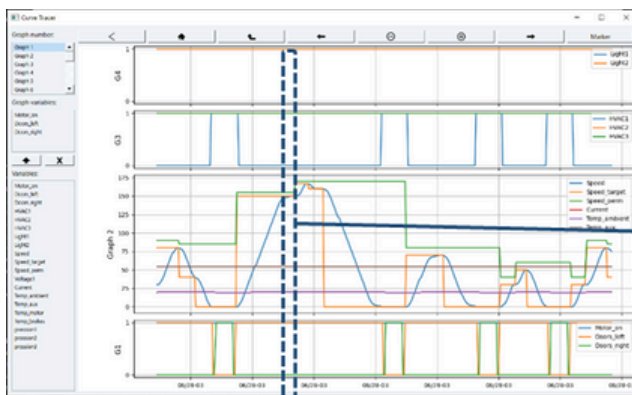
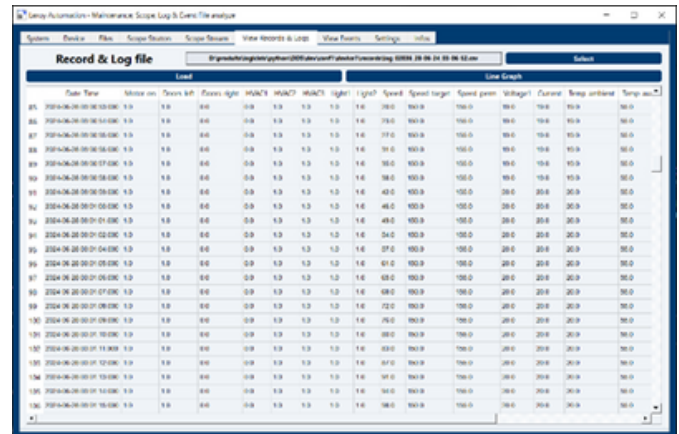




## OFF LINE ANALYSIS: LOG FILES

Device log files uploaded on the PC or On Line data recorded in PC files can be analyzed: data can be displayed numerically or graphically.

- Numerical display: a table is available with all file data.
- Graphical display: multi graphic, data selection for each graphic, zoom features with milliseconds resolution and data marker.



## OFF LINE ANALYSIS: EVENT FILES

Device Event files uploaded on the PC can be analyzed:  
Main event features:

- Several list of event managed: one per device or function,
- Associated to each event: up to 24 context values,
- Previous and after event context values are recorded: from 3s before to 2s after the event, every second.

Events can be displayed numerically or graphically, with a filtering tool for any file parameter and any combination of parameters:

- Numerical display: a table is available with all file data,
- Graphical displays, with zoom features:
  - Event occurrences analysis: bar graph view,
  - Event curve analysis: multi graphic, data selection for each graphic, time resolution, data marker.

