5. HW layout generation from Schematic Plan

Starting from the Schematic Plan, Control Table and defined Hw constraint rules, FAST allows:

- to automatically compute the list of needed electronic field device controllers and generate the correspondent cabinet layout.
- an extreme easy customization of the Hw layout simply by drag and drop the existing boards or adding new entities like cabinet, rack or board.

6. MMI automatic generation from Schematic Plan

Starting from the Schematic Plan, FAST is able to automatically generate the draw of MMI easily. The designer can easily customize the generated MMI draw by means of drag and drop and copy and paste operation.

Once all phases are completed the tool is able to automatically generate the CD install of designed interlocking with the executable binary files to be uploaded on target machine.

Configuration Tool

FAST is Hitachi Rail STS’s suite of tools for design and configuration of the new generation of IXL systems.

It dramatically simplifies the operations and steps needed to design a new IXL scheme plan from scratch or to modify an existing one.

It is based on an extremely user-friendly interface that guides the designer from creation of the station or line layout to the generation of the final system files to be uploaded on the target IXL system or/and the generation of a complete simulated environment to be used for testing the system under design.
Main characteristics of FAST tools suite:

- Simplified system design through easy graphical Scheme Plan drawing
- Train movement generation based on graphical objects selection
- Automatic identification and display of the differences between two different versions of the same IXL scheme plan
- Automatic Generation of the Table of Conditions
- Automatic Generation of Bill of Materials starting from Scheme Plan design
- Automatic generation of Man Machine Interface configuration files concurrently to Scheme Plan design
- Automatic generation of IXL system configuration data to be uploaded on the target
- Not relying on third party sw licenses.

Main features:

1. Simple and fast editing of Schematic Plan
   - Editing schematic plan by drag and drop of entities
   - Objects linking by magnet
   - Object main features set by special gadget
   - Set object attributes by smart dialog box with preconfigured values

2. Movement generation and analysis
   - Once the schematic plan is drawn, the tool provides graphic facilities to compute and customize routes, the computation follow the signaling rules of relevant country. By graphic visualization the designer is able to analyze the results of computation and customize it in rapid way. For instance he can choose if activate or not a “flank protection” by a click.

   The tools suite provides also an automatic independent data verification path that can be used to shorten and automate validation activities.

3. Graphic comparison of Schematic Plan modifications
   - RFI (Italian Railway Network) has assessed a time of 5 minutes from updating of Schematic Plan to correspondent Cd install updating.

4. Fast Control Table computation
   - Once the designer has completed the customization phase, FAST is able calculate and show the Control Table in a customizable format.