

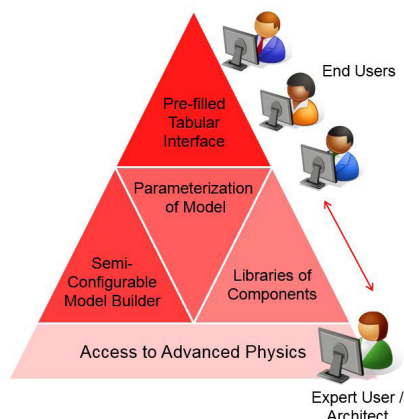
Driving Your Vehicle Simulation



GT-DRIVE+ offers advanced features that differentiate it from the current-generation tools, and address the key needs of vehicle simulation specialists among them:

Challenge: Designers face an ever wider range of possibilities offered by many available alternative technologies, proliferation of product types and multiple legislative requirements. It is a challenge to find, in a timely fashion, optimum solutions across this broadening design space.

Solution: GT-DRIVE+ offers a powerful intuitive interface to set up the requisite models of the multitude of configurations, and execute DOE and optimization processes, while accounting for challenges like electrification and energy management.

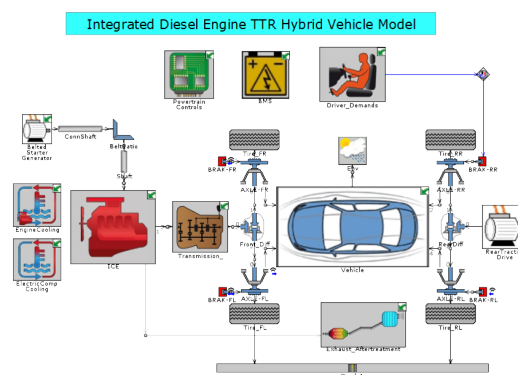


Challenge: The simulation tool has to serve the needs of all vehicle simulation engineers. This means both the lead experts (model architects), who need a flexible modular environment where topologies, components and databases can be created and managed, and the end users, who need above all a simple-to-use environment where they can rapidly execute their design studies.

Solution: GT-DRIVE+ offers both modes of operation and thus can serve the needs of both the expert architects and of the end users, which encourages a workflow that matches the various and often conflicting needs of vehicle design teams.

Challenge: Vehicle modeling engineers should be able to participate in the overall path from initial concept to detailed design to final system integration. Today this path is not smooth and integrated, which leads to needless duplication and inconsistencies.

Solution: GT-DRIVE+ benefits from ready access to black-box detailed models from GT-SUITE, or from 3rd party tools. These detailed physical models for the dynamic engine, thermal and cooling systems, aftertreatment system, and others, complement the models native to GT-DRIVE+ and can be used to capture physics that would otherwise be neglected. Together with PLM tool integration as well as the built-in neutral co-simulation platform xLINK, GT-DRIVE+ ensures a robust and smooth workflow.



The use of GT-DRIVE+ is directly expandable by other teams outside of the core vehicle simulation team, for tasks such as detailed modeling of driveline components, driveability, NVH, 3D vehicle and traction.

GT-DRIVE+ Workflow

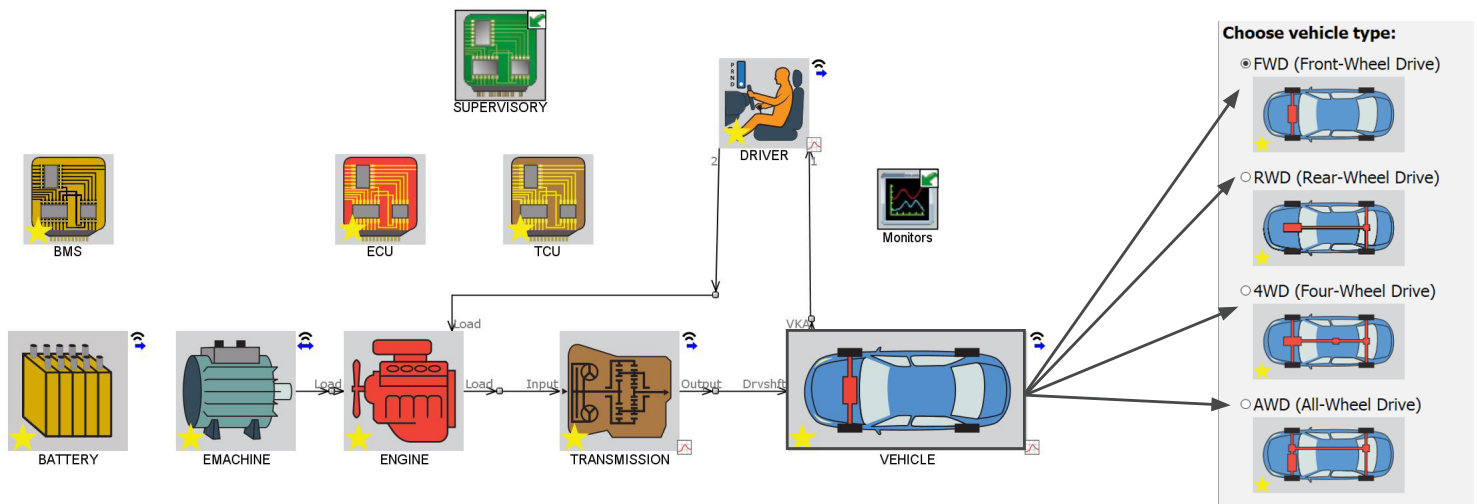
Architects create components and define configurations that are then accessed by users in a model builder.

Architect

Create and define vehicle configurations by accessing the advanced physics libraries provided. Save and share these components to be accessed by users.

User

Utilize the Vehicle Model Builder with components and configurations built into GT-DRIVE+ or designed by architects to build standardized, pre-configured models and optimize emissions, performance, energy management, and more.



Key Features

Model All Vehicle Types

Optimize any vehicle architecture or configuration including hybrid vehicles, electric vehicles, and traditional powertrain vehicles.

Architect and User Operating Modes

Choose between architect and user modes to work in the most appropriate environment. In user mode, utilize the components created by architects and those included in GT-DRIVE+ by accessing them in a vehicle wizard. In architect mode, prepare and manage vehicle configurations.

Access to Advanced Physics Submodels

Transition into GT-SUITE to access advanced physics submodels. Using these submodels, architects are empowered to create detailed components, ensuring more accurate simulation results.

Expandable to Other Related Teams

Easily switch to full GT-SUITE models to use the data and models created by other subsystem teams like VTM, NVH, and more.

